



300 E. Mineral Ave., Suite 10  
 Littleton, CO 80122-2631  
 303/781-8211 303/781-1167 Fax

May 9, 2005

Fluid Minerals Group  
 Bureau of Land Management  
 Vernal Field Office  
 170 South 500 East  
 Vernal, Utah 84078

RE: Application for Permit to Drill—Dominion Exploration & Production, Inc.  
**HCU 13-33F**, *Surface Location:* 1,214' FSL & 356' FWL , SW/4 SW/4,  
*Target Location:* 700' FSL & 800' FWL , SW/4 SW/4,  
 Section 33, T10S, R20E, SLB&M, Uintah County, Utah

Dear Fluid Minerals Group:

On behalf of Dominion Exploration & Production, Inc. (Dominion), Buys & Associates, Inc. respectfully submits the enclosed original and two copies of the *Application for Permit to Drill (APD)* for the above referenced directional well. Included with the APD is the following supplemental information:

Exhibit "A" - Survey plats, layouts and photos of the proposed well site;

Exhibit "B" - Proposed location maps with access and utility corridors;

Exhibit "C" - Production site layout;

Exhibit "D" - Drilling Plan with Directional Drilling Proposal;

Exhibit "E" - Surface Use Plan;

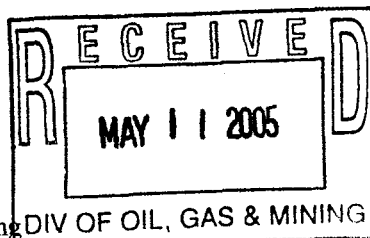
Exhibit "F" - Typical BOP and Choke Manifold diagram.

Please accept this letter as Dominion's, written request for confidential treatment of all information contained in and pertaining to this application.

Thank you very much for your timely consideration of this application. Please feel free to contact myself or Carla Christian of Dominion at 405-749-5263 if you have any questions or need additional information.

Sincerely,

*Don Hamilton*  
 Don Hamilton  
 Agent for Dominion



cc: Diana Whitney, Division of Oil, Gas and Mining  
 Carla Christian, Dominion  
 Marty Buys, Buys & Associates, Inc.

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL  
WELL ☐

GAS  
WELL ☒

OTHER

SINGLE  
ZONE ☒

MULTIPLE  
ZONE ☐

2. NAME OF OPERATOR

Dominion Exploration & Production, Inc.

3. ADDRESS AND TELEPHONE NO.

14000 Quail Springs Parkway, Suite 600, Oklahoma City, OK 73134, 405-749-5263

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. \*)

At surface

1,214' FSL & 356' FWL, SW/4 SW/4,

Section 33

At proposed prod. zone

700' FSL & 800' FWL, SW/4 SW/4, .

Section 33

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

13.03 miles south of Ouray, Utah

15. DISTANCE FROM PROPOSED\*  
LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drig. unit line, if any)

356'

16. NO. OF ACRES IN LEASE

1,880

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40 acres

18. DISTANCE FROM PROPOSED  
LOCATION TO NEAREST WELL,  
DRILLING, COMPLETED, OR  
APPLIED FOR, ON THIS LEASE, FT.

25'

19. PROPOSED DEPTH

8,000'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

5,322' GR

22. APPROX. DATE WORK WILL START\*

September 15, 2005

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8" H-40 ST&C	48#	500'	450 sks "C" Cement with additives (see Drilling Plan)
12-1/4"	9-5/8" J-55 LT&C	36#	2,800'	300 sacks Lead and 390 sacks Tail (see Drilling Plan)
7-7/8"	5-1/2" Mav-80 LT&C	17#	8,000'	90 sacks Lead and 600 sacks Tail (see Drilling Plan)

Bond Information:

Bond coverage is provided by Travelers Casualty and Surety Company of America, Bond #76S 63050 0330

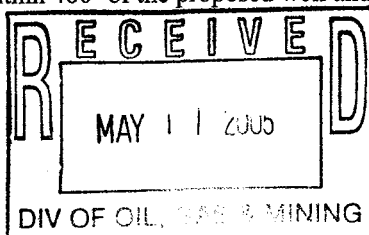
Other Information:

Drilling Plan and Surface Use Plan are attached.

Dominion requests that this complete application for permit to drill be held confidential.

A request for exception to spacing (R649-3-11) is hereby requested based on topography since the well is located within 460' of the drilling unit boundary. Dominion Exploration & Production, Inc. is the only owner and operator within 460' of the proposed well and all points along the intended well bore path.

Surf 613018X  
4417258Y  
39.899760  
-109.677962



BHL 613146X  
4417105Y  
39.898362  
-109.676493

Federal Approval of this  
Action is Necessary

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IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED Don Hamilton Don Hamilton TITLE Agent for Dominion

DATE May 9, 2005

(This space for Federal or State office use)

PERMIT NO. 43-047-36685 APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY

TITLE **BRADLEY G. HILL**  
**ENVIRONMENTAL SCIENTIST III**

DATE 05-17-05

\*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency or the

T10S, R20E, S.L.B.&M.

1928 Brass Cap  
Pile of Stones

S89°11'09"W - 2631.49' (Meas.)

S89°09'00"W - 2630.14' (Meas.)

1928 Brass Cap  
Pile of Stones

1928 Brass Cap  
0.8' High, Pile  
of Stones

N03°32'29"E - 2658.47' (Meas.)

1928 Brass Cap  
Pile of Stones

33

1928 Brass Cap  
0.8' High, Pile  
of Stones

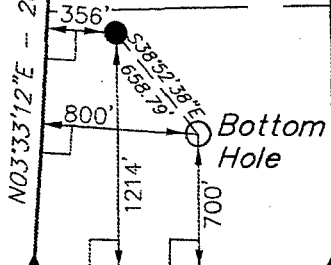
N01°19'12"E - 2644.51' (Meas.)

N01°18'49"E - 2645.67' (Meas.)

HCU #13-33F

Elev. Ungraded Ground = 5322'

N03°33'12"E - 2654.00' (Meas.)



Bottom  
Hole

A.P., Set Stone,  
Pile of Stones

1928 Brass Cap  
0.4' High, E-W  
Fenceline, Set  
Marked Stone

1928 Brass Cap  
1.3' High, Pile  
of Stones

S89°51'17"W -  
1532.82' (Meas.)

S86°17'49"W -  
1318.46' (Meas.)

S89°58'51"W - 2619.67' (Meas.)

T10S  
T11S

#### LEGEND:

└─┘ = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

#### BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.

(NAD 83)

LATITUDE = 39°53'59.03" (39.899731)

LONGITUDE = 109°40'43.22" (109.678672)

(NAD 27)

LATITUDE = 39°53'59.16" (39.899767)

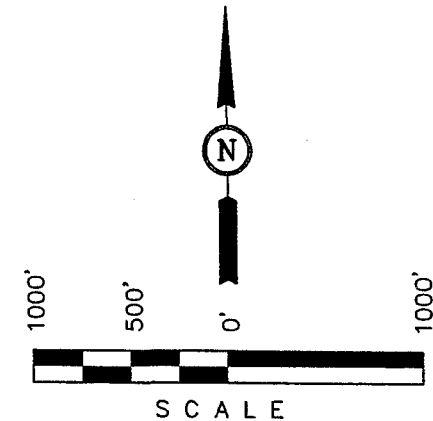
LONGITUDE = 109°40'40.73" (109.677981)

#### DOMINION EXPLR. & PROD., INC.

Well location, HCU #13-33F, located as shown  
in the SW 1/4 SW 1/4 of Section 33, T10S,  
R20E, S.L.B.&M. Uintah County Utah.

#### BASIS OF ELEVATION

SPOT ELEVATION AT THE SOUTHWEST CORNER OF SECTION  
20, T10S, R20E, S.L.B.&M. TAKEN FROM THE BIG PACK  
MTN. NW QUADRANGLE, UTAH, UINTAH COUNTY, 7.5  
MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE  
UNITED STATES DEPARTMENT OF THE INTERIOR,  
GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS  
BEING 5251 FEET.



#### CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM  
FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY  
SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE  
BEST OF MY KNOWLEDGE AND BELIEF.

*Robert L. Key*  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 181319  
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 3-7-05	DATE DRAWN: 3-16-05
PARTY N.H. A.S. K.G.	REFERENCES G.L.O. PLAT	
WEATHER COOL	FILE DOMINION EXPLR. & PROD., INC	

## DRILLING PLAN

### APPROVAL OF OPERATIONS

#### Attachment for Permit to Drill

**Name of Operator:** Dominion Exploration & Production  
**Address:** 14000 Quail Springs Parkway, Suite 600  
Oklahoma City, OK 73134  
**Well Location:** HCU 13-33F  
SHL: 1214' FSL & 356' FWL Section 33-10S-20E  
BHL: 700' FSL & 800' FWL Section 33-10S-20E  
Uintah County, UT

1. GEOLOGIC SURFACE FORMATION Uintah

2. ESTIMATED DEPTHS OF IMPORTANT GEOLOGIC MARKERS

<u>Formation</u>	<u>Depth</u>
Wasatch Tongue	3,540'
Uteland Limestone	3,910'
Wasatch	4,070'
Chapita Wells	4,990'
Uteland Buttes	6,215'
Mesaverde	7,140'

3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS

<u>Formation</u>	<u>Depth</u>	<u>Type</u>
Wasatch Tongue	3,540'	Oil
Uteland Limestone	3,910'	Oil
Wasatch	4,070'	Gas
Chapita Wells	4,990'	Gas
Uteland Buttes	6,215'	Gas
Mesaverde	7,140'	Gas

4. PROPOSED CASING PROGRAM

All casing used to drill this well will be new casing.

<u>Type</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Conn.</u>	<u>Top</u>	<u>Bottom</u>	<u>Hole</u>
Surface	13-3/8"	48.0 ppf	H-40	STC	0'	500'	17-1/2"
Intermediate	9-5/8"	36.0 ppf	J-55	LTC	0'	2,800'	12-1/4"
Production	5-1/2"	17.0 ppf	MAV-80	LTC	0'	8,000'	7-7/8"

5. OPERATOR'S MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL

Surface hole: No BOPE will be utilized.

Intermediate hole: To be drilled using a diverter stack with rotating head to divert flow from rig floor.

Production hole: Prior to drilling out the intermediate casing shoe, 3,000 psi or greater BOP equipment will be installed. The pipe rams will be operated at least once per day from intermediate casing to total depth. The blind rams will be tested once per day from intermediate casing to total depth if operations permit.

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## DRILLING PLAN

### APPROVAL OF OPERATIONS

A diagram of the planned BOP equipment for normal drilling operations in this area is attached. As denoted there will be two valves and one check valve on the kill line, two valves on the choke line, and two adjustable chokes on the manifold system. The BOP "stack" will consist of two BOP rams (1 pipe, 1 blind) and one annular type preventer, all rated to a minimum of 3,000 psi working pressure.

The BOP equipment will be pressure tested prior to drilling below the intermediate casing shoe. All test pressures will be maintained for fifteen (15) minutes without any significant pressure decrease. Clear water will be circulated into the BOP stack and lines prior to pressure testing. The following test pressures will be used as a minimum for various equipment items.

1.	Annular BOP	1,500 psi
2.	Ram type BOP	3,000 psi
3.	Kill line valves	3,000 psi
4.	Choke line valves and choke manifold valves	3,000 psi
5.	Chokes	3,000 psi
6.	Casing, casinghead & weld	1,500 psi
7.	Upper kelly cock and safety valve	3,000 psi
8.	Dart valve	3,000 psi

#### 6. MUD SYSTEMS

- An air or an air/mist system may be used to drill the surface hole until water influx becomes too great.
- KCL mud system will be used to drill well.

<u>Depths</u>	<u>Mud Weight (ppg)</u>	<u>Mud System</u>
0' - 500'	8.4	Air foam mist, no pressure control
500' - 2,800'	8.6	Fresh water, rotating head and diverter
2,800' - 8,000'	8.6	Fresh water/2% KCL/KCL mud system

#### 7. BLOOIE LINE

- An automatic igniter will not be installed on blooie line. The blooie will have a constant ignition source.
- A "target tee" connection will be installed on blooie line for 90° change of directions for abrasion resistance.
- "Target tee" connections will be a minimum of 50' from wellhead.
- The blooie line discharge will be a minimum of 100' from the wellhead.

#### 8. AUXILIARY EQUIPMENT TO BE USED

- a. Kelly cock.
- b. Full opening valve with drill pipe connection will be kept on floor. Valve will be used when the kelly is not in string.

#### 9. TESTING, LOGGING, AND CORING PROGRAMS TO BE FOLLOWED

- A drillstem test in the Wasatch Tongue is possible.
- One electric line wire-log will be run from total depth to intermediate casing.
- The gamma ray will be left on to record from total depth to intermediate casing.
- Other log curves (resistivities, porosity, and caliper) will record from total depth to intermediate casing.
- A dipmeter, percussion cores, or rotary cores may be run over selected intervals.

#### 10. ANTICIPATED ABNORMAL PRESSURES OR TEMPERATURES EXPECTED

- Expected BHP 1,500-2,000 psi (lower than normal pressure gradient).
- No abnormal temperature or pressures are anticipated.
- The formations to be penetrated do not contain known H<sub>2</sub>S gas.

#### 11. WATER SUPPLY

- No water pipelines will be laid for this well.
- No water well will be drilled for this well.
- Drilling water for this will be hauled on the road(s) shown in Attachment No. 3.
- Water will be hauled from: Water Permit # 43-10447 Section 9, Township 8 South, Range 20 East

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## DRILLING PLAN

### APPROVAL OF OPERATIONS

#### 12. CEMENT SYSTEMS

##### a. Surface Cement:

Drill 17-1/2" hole to 500' and cement 13-3/8" to surface with 450 sks class "C" cement with 2% CaCl<sub>2</sub> and 1/4 #/sk. Poly-E-Flakes (volume includes 40% excess). Top out if necessary with Top Out cement listed below.

##### b. Intermediate Casing Cement:

- Drill 12-1/4" hole to 2,800'±, run and cement 9-5/8" to surface.
- Pump 20 bbls lightly weighted water spacer followed by 5 bbls fresh water. Displace with any available water.
- Casing to be run with: a) guide shoe b) insert float c) three (3) centralizers, one on each of first 3 joints d) stop ring for plug two joints off bottom e) bottom three joints thread locked f) pump job with bottom plug only.
- Cement to surface not required due to surface casing set deeper than normal.

Type	Sacks	Interval	Density	Yield	Hole Volume	Cement Volume	Excess
Lead	300	0'-2,000'	11.0 ppg	3.82 CFS	658 CF	1,152 CF	75%
Tail	390	2,000'-2,800'	15.6 ppg	1.20 CFS	268 CF	469 CF	75%

Lead Mix: Halliburton Prem Plus V blend. Blend includes Class "C" cement, gel, salt, gilsonite, EX-1 and HR-7.  
Slurry yield: 3.82 cf/sack      Slurry weight: 11.00 #/gal.  
Water requirement: 22.95 gal/sack  
Compressives @ 130°F: 157 psi after 24 hours

Tail Mix: Class "G" Cement, 1/4 lb/sk Cellophane Flakes + 2% bwoc Calcium Chloride + 44.3% fresh water.  
Pump Time: 1 hr. 5 min. @ 90 °F.  
Compressives @ 95 °F: 24 Hour is 4,700 psi

##### c. Production Casing Cement:

- Drill 7-7/8" hole to 8,000'±, run and cement 5 1/2".
- Cement interface is at 3,700', which is typically 500'-1,000' above shallowest pay.
- Pump 20 bbl Mud Clean II unweighted spacer, followed by 20 Bbls fresh H2O spacer.
- Displace with 3% KCL.

Type	Sacks	Interval	Density	Yield	Hole Volume	Cement Volume	Excess
Lead	90	3,700'-4,500'	11.5 ppg	3.12 CFS	139 CF	277 CF	100%
Tail	600	4,500'-8,000'	13.0 ppg	1.75 CFS	525 CF	1050 CF	100%

Note: Caliper will be run to determine exact cement volume.

Lead Mix: Halliburton Prem Plus V blend. Blend includes Class "C" cement, gel, salt, gilsonite, EX-1 and HR-7.  
Slurry yield: 3.12 cf/sack      Slurry weight: 11.60 #/gal.  
Water requirement: 17.71 gal/sack  
Compressives @ 130°F: 157 psi after 24 hours

Tail Mix: Halliburton HLC blend (Prem Plus V/JB flyash). Blend includes Class "G" cement, KCl, EX-1, Halad 322, & HR-5.  
Slurry yield: 1.75 cf/sack      Slurry weight: 13.00 #/gal.  
Water requirement: 9.09 gal/sack  
Compressives @ 165°F: 905 psi after 24 hours

#### 13. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS

Starting Date: September 15, 2005  
Duration: 14 Days

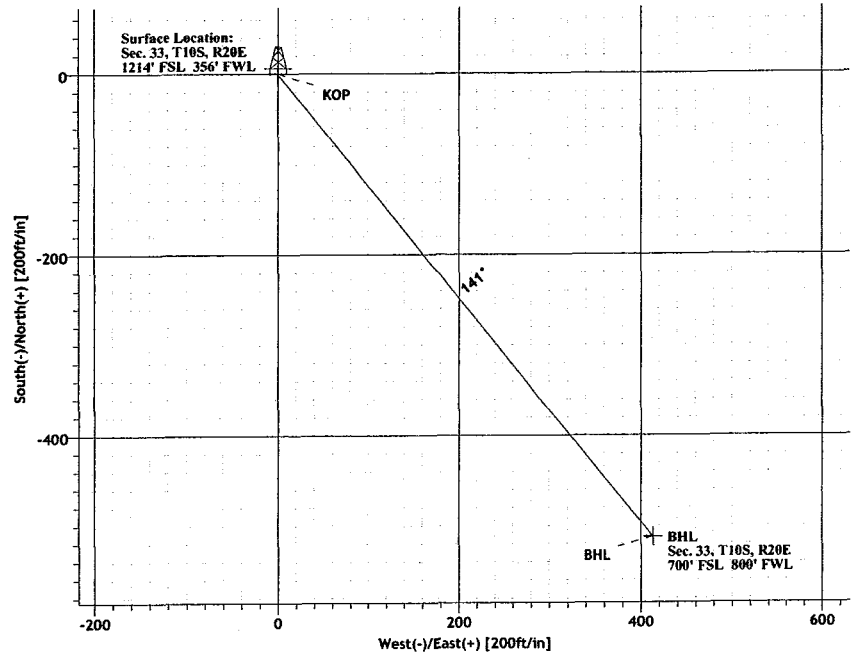
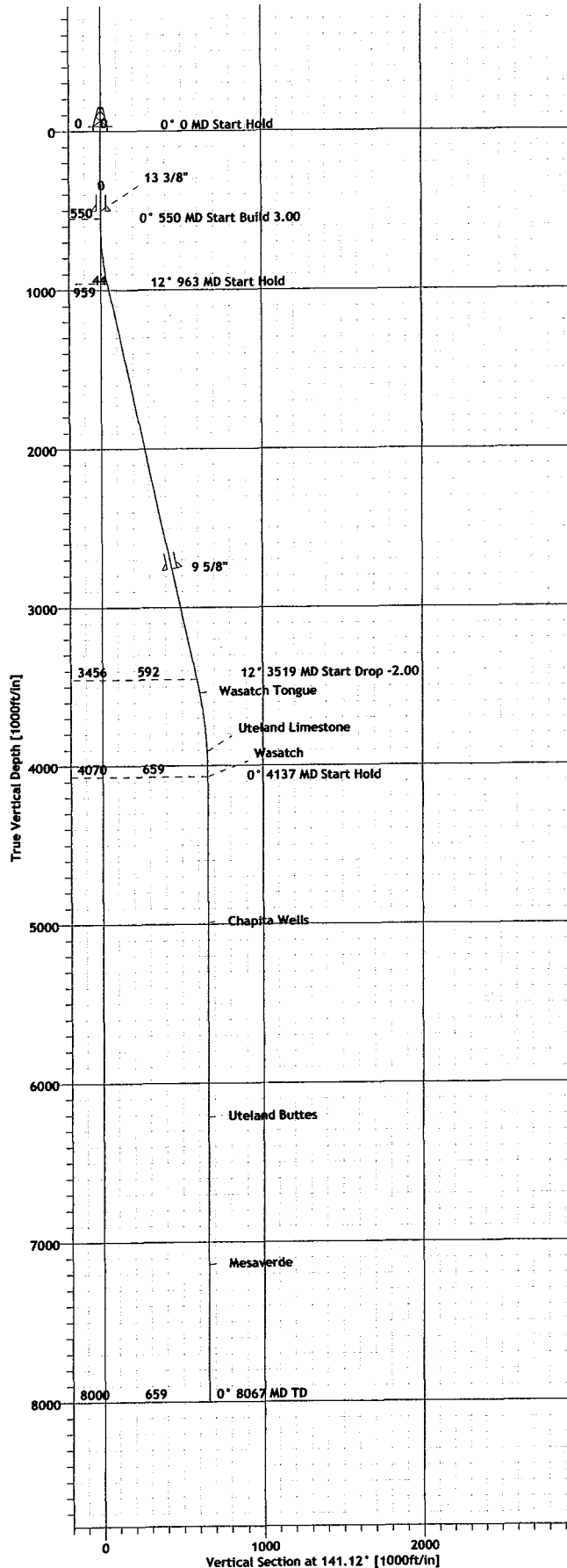
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# Plan #1

# ●Dominion E & P

Well: HCU 13-33F  
Field: Hill Creek Unit  
Uintah Co. Utah  
Sec. 33, T10S, R20E



## SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	141.12	0.00	0.00	0.00	0.00	0.00	0.00	
2	550.00	0.00	141.12	550.00	0.00	0.00	0.00	141.12	0.00	
3	962.53	12.38	141.12	959.33	-34.55	27.86	3.00	141.12	44.38	
4	3518.60	12.38	141.12	3456.00	-461.03	371.71	0.00	0.00	592.21	
5	4137.40	0.00	141.12	4070.00	-512.86	413.49	2.00	180.00	658.79	
6	8067.40	0.00	141.12	8000.00	-512.86	413.49	0.00	141.12	658.79	

## WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
HCU 13-33F	0.00	0.00	7137417.25	2151348.52	39°53'59.030N	109°40'43.220W	N/A

## FORMATION TOP DETAILS

No.	TVDPath	MDPath	Formation
1	3540.00	3604.33	Wasatch Tongue
2	3910.00	3977.32	Uteland Limestone
3	4070.00	4137.40	Wasatch
4	4990.00	5057.40	Chapita Wells
5	6215.00	6282.40	Uteland Buttes
6	7140.00	7207.40	Mesaverde

## WELLPATH DETAILS

Ref. Datum:	est.KB@5340'	0.00ft
V.Section Angle	Origin +N/-S	Origin +E/-W
	141.12°	0.00
Starting From TVD		0.00

## REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Site Centre HCU 13-33F, True North  
Vertical (TVD) Reference: est.KB@5340' 0.00  
Section (VS) Reference: Site Centre (0.00N,0.00E)  
Measured Depth Reference: est.KB@5340' 0.00  
Calculation Method: Minimum Curvature



Azimuths to True North  
Magnetic North: 11.91°

Magnetic Field  
Strength: 52910nT  
Dip Angle: 65.91°  
Date: 4/29/2005  
Model: igr2005

## FIELD DETAILS

Natural Buttes Field  
Uintah County, Utah  
USA

Geodetic System: US State Plane Coordinate System 1983  
Ellipsoid: GRS 1980  
Zone: Utah, Central Zone  
Magnetic Model: igr2005  
System Datum: Mean Sea Level  
Local North: True North

## SITE DETAILS

HCU 13-33F  
Hill Creek Unit  
Sec. 33, T10S, R20E

Site Centre Latitude: 39°53'59.030N  
Longitude: 109°40'43.220W

Ground Level: 5322.00  
Positional Uncertainty: 0.00  
Convergence: 1.17

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# Ryan Energy Technologies

## Planning Report



**Company:** Dominion E & P  
**Field:** Natural Buttes Field  
**Site:** HCU 13-33F  
**Well:** HCU 13-33F  
**Wellpath:** 1

**Date:** 4/29/2005  
**Co-ordinate(NE) Reference:** HCU 13-33F, True North  
**Vertical (TVD) Reference:** est.KB@5340' 0.0  
**Section (VS) Reference:** Site (0.00N,0.00E,141.12Azi)  
**Plan:** Plan #1

**Page:** 1

**Field:** Natural Buttes Field  
 Uintah County, Utah  
 USA

**Map System:** US State Plane Coordinate System 1983  
**Geo Datum:** GRS 1980  
**Sys Datum:** Mean Sea Level

**Map Zone:** Utah, Central Zone  
**Coordinate System:** Site Centre  
**Geomagnetic Model:** igrf2005

**Site:** HCU 13-33F  
 Hill Creek Unit  
 Sec. 33, T10S, R20E

**Site Position:**  
**From:** Geographic  
**Position Uncertainty:** 0.00 ft  
**Ground Level:** 5322.00 ft

**Northing:** 7137417.25 ft  
**Easting:** 2151348.52 ft

**Latitude:** 39 53 59.030 N  
**Longitude:** 109 40 43.220 W  
**North Reference:** True  
**Grid Convergence:** 1.17 deg

**Well:** HCU 13-33F

**Slot Name:**

**Surface Position:** +N/-S 0.00 ft  
 +E/-W 0.00 ft  
**Position Uncertainty:** 0.00 ft  
**Reference Point:** +N/-S 0.00 ft  
 +E/-W 0.00 ft

**Northing:** 7137417.25 ft  
**Easting:** 2151348.52 ft  
**Measured Depth:** 0.00 ft  
**Vertical Depth:** 0.00 ft

**Latitude:** 39 53 59.030 N  
**Longitude:** 109 40 43.220 W  
**Inclination:** 0.00 deg  
**Azimuth:** 0.00 deg

**Wellpath:** 1

**Current Datum:** est.KB@5340'  
**Magnetic Data:** 4/29/2005  
**Field Strength:** 52910 nT  
**Vertical Section: Depth From (TVD)**

**Height** 0.00 ft

**Drilled From:** Well Ref. Point  
**Tie-on Depth:** 0.00 ft  
**Above System Datum:** Mean Sea Level  
**Declination:** 11.91 deg  
**Mag Dip Angle:** 65.91 deg  
**+E/-W**

ft

+N/-S  
ft

+E/-W  
ft

**Direction**  
deg

0.00

0.00

0.00

141.12

**Plan:** Plan #1

**Date Composed:** 4/29/2005

**Principal:** No

**Version:** 1  
**Tied-to:** From Well Ref. Point

### Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	141.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
550.00	0.00	141.12	550.00	0.00	0.00	0.00	0.00	0.00	141.12	
962.53	12.38	141.12	959.33	-34.55	27.86	3.00	3.00	0.00	141.12	
3518.60	12.38	141.12	3456.00	-461.03	371.71	0.00	0.00	0.00	0.00	
4137.40	0.00	141.12	4070.00	-512.86	413.49	2.00	-2.00	0.00	180.00	
8067.40	0.00	141.12	8000.00	-512.86	413.49	0.00	0.00	0.00	141.12	

### Section 1 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
0.00	0.00	141.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	141.12	100.00	0.00	0.00	0.00	0.00	0.00	0.00	141.12
200.00	0.00	141.12	200.00	0.00	0.00	0.00	0.00	0.00	0.00	141.12
300.00	0.00	141.12	300.00	0.00	0.00	0.00	0.00	0.00	0.00	141.12
400.00	0.00	141.12	400.00	0.00	0.00	0.00	0.00	0.00	0.00	141.12
500.00	0.00	141.12	500.00	0.00	0.00	0.00	0.00	0.00	0.00	141.12
550.00	0.00	141.12	550.00	0.00	0.00	0.00	0.00	0.00	0.00	141.12

### Section 2 : Start Build 3.00

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
600.00	1.50	141.12	599.99	-0.51	0.41	0.65	3.00	3.00	0.00	0.00
700.00	4.50	141.12	699.85	-4.58	3.70	5.89	3.00	3.00	0.00	0.00

**CONFIDENTIAL**



# Ryan Energy Technologies

## Planning Report



Company: Dominion E & P  
Field: Natural Buttes Field  
Site: HCU 13-33F  
Well: HCU 13-33F  
Wellpath: 1

Date: 4/29/2005 Time: 07:30:05  
Co-ordinate(NE) Reference: HCU 13-33F, True North  
Vertical (TVD) Reference: est.KB@5340' 0.0  
Section (VS) Reference: Site (0.00N,0.00E,141.12Azi)  
Plan: Plan #1

Page: 2

### Section 2 : Start Build 3.00

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
800.00	7.50	141.12	799.29	-12.72	10.26	16.34	3.00	3.00	0.00	0.00
900.00	10.50	141.12	898.04	-24.90	20.07	31.98	3.00	3.00	0.00	0.00
962.53	12.38	141.12	959.33	-34.55	27.86	44.38	3.00	3.00	0.00	0.00

### Section 3 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
1000.00	12.38	141.12	995.93	-40.80	32.90	52.41	0.00	0.00	0.00	0.00
1100.00	12.38	141.12	1093.61	-57.49	46.35	73.84	0.00	0.00	0.00	0.00
1200.00	12.38	141.12	1191.28	-74.17	59.80	95.28	0.00	0.00	0.00	0.00
1300.00	12.38	141.12	1288.96	-90.86	73.25	116.71	0.00	0.00	0.00	0.00
1400.00	12.38	141.12	1386.63	-107.54	86.71	138.14	0.00	0.00	0.00	0.00
1500.00	12.38	141.12	1484.31	-124.23	100.16	159.57	0.00	0.00	0.00	0.00
1600.00	12.38	141.12	1581.99	-140.91	113.61	181.01	0.00	0.00	0.00	0.00
1700.00	12.38	141.12	1679.66	-157.60	127.06	202.44	0.00	0.00	0.00	0.00
1800.00	12.38	141.12	1777.34	-174.28	140.51	223.87	0.00	0.00	0.00	0.00
1900.00	12.38	141.12	1875.01	-190.97	153.97	245.31	0.00	0.00	0.00	0.00
2000.00	12.38	141.12	1972.69	-207.65	167.42	266.74	0.00	0.00	0.00	0.00
2100.00	12.38	141.12	2070.37	-224.34	180.87	288.17	0.00	0.00	0.00	0.00
2200.00	12.38	141.12	2168.04	-241.02	194.32	309.60	0.00	0.00	0.00	0.00
2300.00	12.38	141.12	2265.72	-257.71	207.78	331.04	0.00	0.00	0.00	0.00
2400.00	12.38	141.12	2363.40	-274.39	221.23	352.47	0.00	0.00	0.00	0.00
2500.00	12.38	141.12	2461.07	-291.08	234.68	373.90	0.00	0.00	0.00	0.00
2600.00	12.38	141.12	2558.75	-307.76	248.13	395.33	0.00	0.00	0.00	0.00
2700.00	12.38	141.12	2656.42	-324.45	261.59	416.77	0.00	0.00	0.00	0.00
2800.00	12.38	141.12	2754.10	-341.13	275.04	438.20	0.00	0.00	0.00	0.00
2900.00	12.38	141.12	2851.78	-357.82	288.49	459.63	0.00	0.00	0.00	0.00
3000.00	12.38	141.12	2949.45	-374.51	301.94	481.06	0.00	0.00	0.00	0.00
3100.00	12.38	141.12	3047.13	-391.19	315.39	502.50	0.00	0.00	0.00	0.00
3200.00	12.38	141.12	3144.81	-407.88	328.85	523.93	0.00	0.00	0.00	0.00
3300.00	12.38	141.12	3242.48	-424.56	342.30	545.36	0.00	0.00	0.00	0.00
3400.00	12.38	141.12	3340.16	-441.25	355.75	566.80	0.00	0.00	0.00	0.00
3500.00	12.38	141.12	3437.83	-457.93	369.20	588.23	0.00	0.00	0.00	0.00
3518.60	12.38	141.12	3456.00	-461.03	371.71	592.21	0.00	0.00	0.00	0.00

### Section 4 : Start Drop -2.00

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
3600.00	10.75	141.12	3535.75	-473.74	381.95	608.53	2.00	-2.00	0.00	180.00
3604.33	10.66	141.12	3540.00	-474.36	382.45	609.33	2.00	-2.00	0.00	-180.00
3700.00	8.75	141.12	3634.30	-486.92	392.57	625.46	2.00	-2.00	0.00	180.00
3800.00	6.75	141.12	3733.38	-497.41	401.03	638.94	2.00	-2.00	0.00	180.00
3900.00	4.75	141.12	3832.87	-505.21	407.32	648.96	2.00	-2.00	0.00	180.00
3977.32	3.20	141.12	3910.00	-509.38	410.68	654.31	2.00	-2.00	0.00	-180.00
4000.00	2.75	141.12	3932.65	-510.30	411.42	655.49	2.00	-2.00	0.00	180.00
4100.00	0.75	141.12	4032.60	-512.67	413.34	658.54	2.00	-2.00	0.00	180.00
4137.40	0.00	141.12	4070.00	-512.86	413.49	658.79	2.00	-2.00	0.00	-180.00

### Section 5 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
4200.00	0.00	141.12	4132.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
4300.00	0.00	141.12	4232.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
4400.00	0.00	141.12	4332.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
4500.00	0.00	141.12	4432.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
4600.00	0.00	141.12	4532.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
4700.00	0.00	141.12	4632.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
4800.00	0.00	141.12	4732.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
4900.00	0.00	141.12	4832.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
5000.00	0.00	141.12	4932.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
5057.40	0.00	141.12	4990.00	-512.86	413.49	658.79	0.00	0.00	0.00	141.12

CONFIDENTIAL



# Ryan Energy Technologies

## Planning Report



Company: Dominion E & P  
Field: Natural Buttes Field  
Site: HCU 13-33F  
Well: HCU 13-33F  
Wellpath: 1

Date: 4/29/2005 Time: 07:30:05 Page: 3  
Co-ordinate(NE) Reference: HCU 13-33F, True North  
Vertical (TVD) Reference: KB@5340' 0.0  
Section (VS) Reference: Site (0.00N,0.00E,141.12Azi)  
Plan: Plan #1

### Section 5 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
5100.00	0.00	141.12	5032.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
5200.00	0.00	141.12	5132.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
5300.00	0.00	141.12	5232.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
5400.00	0.00	141.12	5332.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
5500.00	0.00	141.12	5432.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
5600.00	0.00	141.12	5532.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
5700.00	0.00	141.12	5632.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
5800.00	0.00	141.12	5732.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
5900.00	0.00	141.12	5832.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
6000.00	0.00	141.12	5932.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
6100.00	0.00	141.12	6032.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
6200.00	0.00	141.12	6132.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
6282.40	0.00	141.12	6215.00	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
6300.00	0.00	141.12	6232.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
6400.00	0.00	141.12	6332.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
6500.00	0.00	141.12	6432.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
6600.00	0.00	141.12	6532.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
6700.00	0.00	141.12	6632.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
6800.00	0.00	141.12	6732.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
6900.00	0.00	141.12	6832.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
7000.00	0.00	141.12	6932.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
7100.00	0.00	141.12	7032.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
7200.00	0.00	141.12	7132.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
7207.40	0.00	141.12	7140.00	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
7300.00	0.00	141.12	7232.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
7400.00	0.00	141.12	7332.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
7500.00	0.00	141.12	7432.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
7600.00	0.00	141.12	7532.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
7700.00	0.00	141.12	7632.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
7800.00	0.00	141.12	7732.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
7900.00	0.00	141.12	7832.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
8000.00	0.00	141.12	7932.60	-512.86	413.49	658.79	0.00	0.00	0.00	141.12
8067.40	0.00	141.12	8000.00	-512.86	413.49	658.79	0.00	0.00	0.00	141.12

### Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
0.00	0.00	141.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	141.12	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	141.12	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	141.12	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	141.12	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	141.12	500.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP
550.00	0.00	141.12	550.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	1.50	141.12	599.99	-0.51	0.41	0.65	3.00	3.00	0.00	
700.00	4.50	141.12	699.85	-4.58	3.70	5.89	3.00	3.00	0.00	
800.00	7.50	141.12	799.29	-12.72	10.26	16.34	3.00	3.00	0.00	
900.00	10.50	141.12	898.04	-24.90	20.07	31.98	3.00	3.00	0.00	
962.53	12.38	141.12	959.33	-34.55	27.86	44.38	3.00	3.00	0.00	
1000.00	12.38	141.12	995.93	-40.80	32.90	52.41	0.00	0.00	0.00	
1100.00	12.38	141.12	1093.61	-57.49	46.35	73.84	0.00	0.00	0.00	
1200.00	12.38	141.12	1191.28	-74.17	59.80	95.28	0.00	0.00	0.00	
1300.00	12.38	141.12	1288.96	-90.86	73.25	116.71	0.00	0.00	0.00	
1400.00	12.38	141.12	1386.63	-107.54	86.71	138.14	0.00	0.00	0.00	
1500.00	12.38	141.12	1484.31	-124.23	100.16	159.57	0.00	0.00	0.00	
1600.00	12.38	141.12	1581.99	-140.91	113.61	181.01	0.00	0.00	0.00	
1700.00	12.38	141.12	1679.66	-157.60	127.06	202.44	0.00	0.00	0.00	
1800.00	12.38	141.12	1777.34	-174.28	140.51	223.87	0.00	0.00	0.00	
1900.00	12.38	141.12	1875.01	-190.97	153.97	245.31	0.00	0.00	0.00	

CONFIDENTIAL



# Ryan Energy Technologies

## Planning Report



Company: Dominion E & P  
Field: Natural Buttes Field  
Site: HCU 13-33F  
Well: HCU 13-33F  
Wellpath: 1

Date: 4/29/2005 Time: 07:30:05  
Co-ordinate(N/E) Reference: HCU 13-33F, True North  
Vertical (TVD) Reference: KB@5340' 0.0  
Section (VS) Reference: Site (0.00N,0.00E,141.12Azi)  
Plan: Plan #1

Page: 4

### Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
2000.00	12.38	141.12	1972.69	-207.65	167.42	266.74	0.00	0.00	0.00	
2100.00	12.38	141.12	2070.37	-224.34	180.87	288.17	0.00	0.00	0.00	
2200.00	12.38	141.12	2168.04	-241.02	194.32	309.60	0.00	0.00	0.00	
2300.00	12.38	141.12	2265.72	-257.71	207.78	331.04	0.00	0.00	0.00	
2400.00	12.38	141.12	2363.40	-274.39	221.23	352.47	0.00	0.00	0.00	
2500.00	12.38	141.12	2461.07	-291.08	234.68	373.90	0.00	0.00	0.00	
2600.00	12.38	141.12	2558.75	-307.76	248.13	395.33	0.00	0.00	0.00	
2700.00	12.38	141.12	2656.42	-324.45	261.59	416.77	0.00	0.00	0.00	
2800.00	12.38	141.12	2754.10	-341.13	275.04	438.20	0.00	0.00	0.00	
2900.00	12.38	141.12	2851.78	-357.82	288.49	459.63	0.00	0.00	0.00	
3000.00	12.38	141.12	2949.45	-374.51	301.94	481.06	0.00	0.00	0.00	
3100.00	12.38	141.12	3047.13	-391.19	315.39	502.50	0.00	0.00	0.00	
3200.00	12.38	141.12	3144.81	-407.88	328.85	523.93	0.00	0.00	0.00	
3300.00	12.38	141.12	3242.48	-424.56	342.30	545.36	0.00	0.00	0.00	
3400.00	12.38	141.12	3340.16	-441.25	355.75	566.80	0.00	0.00	0.00	
3500.00	12.38	141.12	3437.83	-457.93	369.20	588.23	0.00	0.00	0.00	
3518.60	12.38	141.12	3456.00	-461.03	371.71	592.21	0.00	0.00	0.00	
3600.00	10.75	141.12	3535.75	-473.74	381.95	608.53	2.00	-2.00	0.00	
3604.33	10.66	141.12	3540.00	-474.36	382.45	609.33	2.00	-2.00	0.00	Wasatch Tongue
3700.00	8.75	141.12	3634.30	-486.92	392.57	625.46	2.00	-2.00	0.00	
3800.00	6.75	141.12	3733.38	-497.41	401.03	638.94	2.00	-2.00	0.00	
3900.00	4.75	141.12	3832.87	-505.21	407.32	648.96	2.00	-2.00	0.00	
3977.32	3.20	141.12	3910.00	-509.38	410.68	654.31	2.00	-2.00	0.00	Uteland Limestone
4000.00	2.75	141.12	3932.65	-510.30	411.42	655.49	2.00	-2.00	0.00	
4100.00	0.75	141.12	4032.60	-512.67	413.34	658.54	2.00	-2.00	0.00	
4137.40	0.00	141.12	4070.00	-512.86	413.49	658.79	2.00	-2.00	0.00	Wasatch
4200.00	0.00	141.12	4132.60	-512.86	413.49	658.79	0.00	0.00	0.00	
4300.00	0.00	141.12	4232.60	-512.86	413.49	658.79	0.00	0.00	0.00	
4400.00	0.00	141.12	4332.60	-512.86	413.49	658.79	0.00	0.00	0.00	
4500.00	0.00	141.12	4432.60	-512.86	413.49	658.79	0.00	0.00	0.00	
4600.00	0.00	141.12	4532.60	-512.86	413.49	658.79	0.00	0.00	0.00	
4700.00	0.00	141.12	4632.60	-512.86	413.49	658.79	0.00	0.00	0.00	
4800.00	0.00	141.12	4732.60	-512.86	413.49	658.79	0.00	0.00	0.00	
4900.00	0.00	141.12	4832.60	-512.86	413.49	658.79	0.00	0.00	0.00	
5000.00	0.00	141.12	4932.60	-512.86	413.49	658.79	0.00	0.00	0.00	
5057.40	0.00	141.12	4990.00	-512.86	413.49	658.79	0.00	0.00	0.00	Chapita Wells
5100.00	0.00	141.12	5032.60	-512.86	413.49	658.79	0.00	0.00	0.00	
5200.00	0.00	141.12	5132.60	-512.86	413.49	658.79	0.00	0.00	0.00	
5300.00	0.00	141.12	5232.60	-512.86	413.49	658.79	0.00	0.00	0.00	
5400.00	0.00	141.12	5332.60	-512.86	413.49	658.79	0.00	0.00	0.00	
5500.00	0.00	141.12	5432.60	-512.86	413.49	658.79	0.00	0.00	0.00	
5600.00	0.00	141.12	5532.60	-512.86	413.49	658.79	0.00	0.00	0.00	
5700.00	0.00	141.12	5632.60	-512.86	413.49	658.79	0.00	0.00	0.00	
5800.00	0.00	141.12	5732.60	-512.86	413.49	658.79	0.00	0.00	0.00	
5900.00	0.00	141.12	5832.60	-512.86	413.49	658.79	0.00	0.00	0.00	
6000.00	0.00	141.12	5932.60	-512.86	413.49	658.79	0.00	0.00	0.00	
6100.00	0.00	141.12	6032.60	-512.86	413.49	658.79	0.00	0.00	0.00	
6200.00	0.00	141.12	6132.60	-512.86	413.49	658.79	0.00	0.00	0.00	
6282.40	0.00	141.12	6215.00	-512.86	413.49	658.79	0.00	0.00	0.00	Uteland Buttes
6300.00	0.00	141.12	6232.60	-512.86	413.49	658.79	0.00	0.00	0.00	
6400.00	0.00	141.12	6332.60	-512.86	413.49	658.79	0.00	0.00	0.00	
6500.00	0.00	141.12	6432.60	-512.86	413.49	658.79	0.00	0.00	0.00	
6600.00	0.00	141.12	6532.60	-512.86	413.49	658.79	0.00	0.00	0.00	

CONFIDENTIAL



# Ryan Energy Technologies

## Planning Report



Company: Dominion E & P  
Field: Natural Buttes Field  
Site: HCU 13-33F  
Well: HCU 13-33F  
Wellpath: 1

Date: 4/29/2005 Time: 07:30:05  
Co-ordinate(NE) Reference: HCU 13-33F, True North  
Vertical (TVD) Reference: KB@5340' 0.0  
Section (VS) Reference: Site (0.00N,0.00E,141.12Azi)  
Plan: Plan #1

Page: 5

### Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
6700.00	0.00	141.12	6632.60	-512.86	413.49	658.79	0.00	0.00	0.00	
6800.00	0.00	141.12	6732.60	-512.86	413.49	658.79	0.00	0.00	0.00	
6900.00	0.00	141.12	6832.60	-512.86	413.49	658.79	0.00	0.00	0.00	
7000.00	0.00	141.12	6932.60	-512.86	413.49	658.79	0.00	0.00	0.00	
7100.00	0.00	141.12	7032.60	-512.86	413.49	658.79	0.00	0.00	0.00	
7200.00	0.00	141.12	7132.60	-512.86	413.49	658.79	0.00	0.00	0.00	
7207.40	0.00	141.12	7140.00	-512.86	413.49	658.79	0.00	0.00	0.00	Mesaverde
7300.00	0.00	141.12	7232.60	-512.86	413.49	658.79	0.00	0.00	0.00	
7400.00	0.00	141.12	7332.60	-512.86	413.49	658.79	0.00	0.00	0.00	
7500.00	0.00	141.12	7432.60	-512.86	413.49	658.79	0.00	0.00	0.00	
7600.00	0.00	141.12	7532.60	-512.86	413.49	658.79	0.00	0.00	0.00	
7700.00	0.00	141.12	7632.60	-512.86	413.49	658.79	0.00	0.00	0.00	
7800.00	0.00	141.12	7732.60	-512.86	413.49	658.79	0.00	0.00	0.00	
7900.00	0.00	141.12	7832.60	-512.86	413.49	658.79	0.00	0.00	0.00	
8000.00	0.00	141.12	7932.60	-512.86	413.49	658.79	0.00	0.00	0.00	
8067.40	0.00	141.12	8000.00	-512.86	413.49	658.79	0.00	0.00	0.00	BHL

### Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<--- Latitude --->			<--- Longitude --->		
KOP			550.00	0.00	0.00	7137417.252151	348.52	39	53	59.030 N	109	40	43.220 W
-Plan hit target													
BHL			8000.00	-512.86	413.49	7136912.912151	1772.37	39	53	53.961 N	109	40	37.914 W
-Plan hit target													

### Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
3604.33	3540.00	Wasatch Tongue		0.00	0.00
3977.32	3910.00	Uteland Limestone		0.00	0.00
4137.40	4070.00	Wasatch		0.00	0.00
5057.40	4990.00	Chapita Wells		0.00	0.00
6282.40	6215.00	Uteland Buttes		0.00	0.00
7207.40	7140.00	Mesaverde		0.00	0.00

**CONFIDENTIAL**



## **SURFACE USE PLAN**

### **CONDITIONS OF APPROVAL**

#### *Attachment for Permit to Drill*

**Name of Operator:** Dominion Exploration & Production  
**Address:** 14000 Quail Springs Parkway, Suite 600  
Oklahoma City, OK 73134  
**Well Location:** HCU 13-33F  
SHL: 1214' FSL & 356' FWL Section 33-10S-20E  
BHL: 700' FSL & 800' FWL Section 33-10S-20E  
Uintah County, UT

The dirt contractor will be provided with an approved copy of the surface use plan of operations before initiating construction.

The federal onsite inspection for the referenced well was conducted on Thursday, March 31, 2005 at approximately 2:45 pm. In attendance at the onsite inspection were the following individuals:

Ken Secrest	Foreman	Dominion E & P, Inc.
Brandon Bowthorpe	Surveyor	Uintah Engineering and Land Surveying
Jesse Merkley	Surveyors Helper	Uintah Engineering and Land Surveying
Stan Olmstead	Nat. Res. Prot. Spec.	Bureau of Land Management – Vernal
Randy Jackson	Foreman	Jackson Construction
Lonnie Hogan	Foreman	LaRose Construction
Don Hamilton	Permitting Agent	Buys & Associates, Inc.

1. **Existing Roads:**

- a. The proposed well site is located approximately 13.03 miles south of Ouray, UT.
- b. Directions to the proposed well site have been attached at the end of Exhibit B.
- c. The use of roads under State and County Road Department maintenance are necessary to access the Hill Creek Unit. However, an encroachment permit is not anticipated since no upgrades to the State or County Road system are proposed at this time.
- d. All existing roads will be maintained and kept in good repair during all phases of operation.
- e. Vehicle operators will obey posted speed restrictions and observe safe speeds commensurate with road and weather conditions.
- f. Since no improvements are anticipated to the State, County, Tribal or BLM access roads no topsoil striping will occur.
- g. An off-lease federal Right-of-Way is not anticipated for the access road or utility corridor since both are located within the existing Hill Creek Unit boundary.

2. Planned Access Roads:

- a. From the proposed road that will access the HCU 10-28F an access is proposed trending northeast approximately 0.1 miles to the proposed well site. The access consists of entirely new disturbance and crosses no significant drainages. A road design plan is not anticipated at this time.
- b. The proposed access road will consist of a 14' travel surface within a 30' disturbed area.
- c. BLM approval to construct and utilize the proposed access road is requested with this application.
- d. A maximum grade of 10% will be maintained throughout the project with no cuts and fills required to access the well.
- e. No turnouts are proposed since the access road is only 0.1 miles long and adequate site distance exists in all directions.
- f. No culverts or low water crossings are anticipated. Adequate drainage structures will be incorporated into the road.
- g. No surfacing material will come from federal or Indian lands.
- h. No gates or cattle guards are anticipated at this time.
- i. Surface disturbance and vehicular travel will be limited to the approved location access road.
- j. All access roads and surface disturbing activities will conform to the standards outlined in the Bureau of Land Management and Forest Service publication: Surface Operating Standards for Oil and Gas Exploration and Development, (1989).
- k. The operator will be responsible for all maintenance of the access road including drainage structures.

3. Location of Existing Wells:

- a. Following is a list of existing wells within a one mile radius of the proposed well:
  - i. Water wells               None
  - ii. Injection wells       None
  - iii. Disposal wells       None
  - iv. Drilling wells       None
  - v. Temp. shut-in wells   1
  - vi. Producing wells       None
  - vii. Abandon wells       None
- b. Exhibit B has a map reflecting these wells within a one mile radius of the proposed well.

4. Location of Production Facilities:

- a. All permanent structures will be painted a flat, non-reflective Desert Brown to match the standard environmental colors. All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) may be excluded.
- b. Site security guidelines identified in 43 CFR 3163.7-5 and Onshore Oil and Gas Order No. 3 will be adhered to.
- c. A gas meter run will be constructed and located on lease within 500 feet of the wellhead. Meter runs will be housed and/or fenced. All gas production and measurement shall comply with the provisions of 43 CFR 3162.7-3, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3.
- d. A tank battery will be constructed on this location; it will be surrounded by a dike of sufficient capacity to contain the storage capacity of the largest tank. All loading lines and valves will be placed inside the berm surrounding the tank battery. All liquid hydrocarbons production and measurement shall conform to the provisions of 43 CFR 3162.7-3 and Onshore Oil and Gas Order No. 4 and Onshore Oil and Gas Order No. 5 for natural gas production and measurement.
- e. Any necessary pits will be properly fenced to prevent any wildlife and livestock entry.
- f. All access roads will be maintained as necessary to prevent erosion and accommodate year-round traffic. The road will be maintained in a safe useable condition.
- g. The site will require periodic maintenance to ensure that drainages are kept open and free of debris, ice, and snow, and that surfaces are properly treated to reduce erosion, fugitive dust, and impacts to adjacent areas.
- h. A gas pipeline is associated with this application and is being applied for at this time. The proposed gas pipeline corridor will leave the west side of the well site and traverse 536' west to the proposed 10" pipeline that will service the HCU 10-28F.
- i. The new gas pipeline will be a 6" steel surface line within a 20' wide utility corridor. The use of the proposed well site and access roads will facilitate the staging of the pipeline construction. A new pipeline length of approximately 536' is associated with this well.
- j. Dominion intends on installing the pipeline on the surface by welding many joints into long lengths, dragging the long lengths into position and then completing a final welding pass to join the long lengths together. Dominion intends on connecting the pipeline together utilizing conventional welding technology.

5. Location and Type of Water Supply:

- a. The location and type of water supply has been addressed as number 11 within the previous drilling plan information.

6. Source of Construction Material:

- a. The use of materials will conform to 43 CFR 3610.2-3.
- b. No construction materials will be removed from Ute Tribal or BLM lands.
- c. If any gravel is used, it will be obtained from a state approved gravel pit.

7. Methods of Handling Waste Disposal:

- a. All wastes associated with this application will be contained and disposed of utilizing approved facilities.
- b. Drill cuttings will be contained and buried on site.
- c. The reserve pit will be located outboard of the location and along the south side of the pad.
- d. The reserve pit will be constructed so as not to leak, break, or allow any discharge.
- e. The reserve pit will be lined with 12 mil minimum thickness plastic nylon reinforced liner material. The liner will overlay a felt liner pad only if rock is encountered during excavation. The pit liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash, scrap pipe, etc., that could puncture the liner will be disposed of in the pit. Pit walls will be sloped no greater than 2:1. A minimum 2-foot freeboard will be maintained in the pit at all times during the drilling and completion operation.
- f. The reserve pit has been located in cut material. Three sides of the reserve pit will be fenced before drilling starts. The fourth side will be fenced as soon as drilling is completed, and shall remain until the pit is dry. After the reserve pit has dried, all areas not needed for production will be rehabilitated.
- g. No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completion of the well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completion of the well.
- h. Trash will be contained in a trash cage and hauled away to an approved disposal site as necessary but no later than at the completion of drilling operations. The contents of the trash container will be hauled off periodically to the approved Uintah County Landfill near Vernal, Utah.
- i. Produced fluids from the well other than water will be produced into a test tank until such time as construction of production facilities is completed. Any spills of oil, gas, salt water or other produced fluids will be cleaned up and removed.
- j. After initial clean-up, a 400 bbl tank will be installed to contain produced waste water. This water will be transported from the tank to an approved Dominion disposal well for disposal.
- k. Produced water from the production well will be disposed of at the RBU 13-11F or RBU 16-19F disposal wells in accordance with Onshore Order #7.
- l. Any salts and/or chemicals, which are an integral part of the drilling system, will be disposed of in the same manner as the drilling fluid.

- m. Sanitary facilities will be on site at all times during operations. Sewage will be placed in a portable chemical toilet and the toilet replaced periodically utilizing a licensed contractor to transport by truck the portable chemical toilet so that its contents can be delivered to the Vernal Wastewater Treatment Facility in accordance with state and county regulations.

8. Ancillary Facilities:

- a. Garbage Containers and Portable Toilets are the only ancillary facilities proposed in this application.

9. Well Site Layout: (See Exhibit B)

- a. The well will be properly identified in accordance with 43 CFR 3162.6.
- b. Access to the well pad will be from the west.
- c. The pad and road designs are consistent with BLM specification
- d. A pre-construction meeting with responsible company representative, contractors and the BLM will be conducted at the project site prior to commencement of surface-disturbing activities. The pad and road will be construction-staked prior to this meeting.
- e. The pad has been staked at its maximum size of 355' X 200'; however it will be constructed smaller if possible, depending upon rig availability. Should the layout change, this application will be amended and approved utilizing a sundry notice.
- f. All surface disturbing activities, will be supervised by a qualified, responsible company representative who is aware of the terms and conditions of the APD and specifications in the approved plans.
- g. All cut and fill slopes will be such that stability can be maintained for the life of the activity.
- h. Diversion ditches will be constructed as shown around the well site to prevent surface waters from entering the well site area.
- i. The site surface will be graded to drain away from the pit to avoid pit spillage during large storm events.
- j. The stockpiled topsoil (first 6 inches or maximum available) will be stored in a windrow on the uphill side of the location to prevent any possible contamination. All topsoil will be stockpiled for reclamation in such a way as to prevent soil loss and contamination.
- k. Pits will remain fenced until site cleanup.
- l. The blooie line will be located at least 100 feet from the well head.
- m. Water injection may be implemented if necessary to minimize the amount of fugitive dust.

10. Plans for Restoration of the Surface:

- a. Site reclamation for a producing well will be accomplished for portions of the site not required for the continued operation of the well.
- b. The Operator will control noxious weeds along access road use authorizations, pipeline route authorizations, well sites, or other applicable facilities by spraying or mechanical removal. A list of noxious weeds may be obtained from the BLM or the appropriate County Extension Office. On Ute Tribal and BLM administered land, it is required that a Pesticide Use Proposal be submitted and approved prior to the application of herbicides, pesticides or possibly hazardous chemicals.
- c. Upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1. Once the reserve pit is dry, the plastic nylon reinforced liner shall be torn and perforated before backfilling of the reserve pit. The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours.
- d. The cut and fill slopes and all other disturbed areas not needed for the production operation will be top soiled and re-vegetated. The stockpiled topsoil will be evenly distributed over the disturbed area.
- e. Prior to reseeding the site, all disturbed areas, including the access road, will be scarified and left with a rough surface. The site will then be seeded and/or planted as prescribed by the BLM. The BLM recommended seed mix will be identified in the BLM approval documents.

11. Surface and Mineral Ownership:

- a. Surface Ownership – Federal under the management of the Bureau of Land Management - Vernal Field Office, 170 South 500 East, Vernal, Utah 84078; 435-781-4400.
- b. Mineral Ownership – Federal under the management of the Bureau of Land Management - Vernal Field Office, 170 South 500 East, Vernal, Utah 84078; 435-781-4400.

12. Other Information:

- a. AIA Archaeological has conducted a Class III archeological survey. A copy of the report has been submitted under separate cover to the appropriate agencies by AIA Archaeological.
- b. Our understanding of the results of the onsite inspection are:
  - a. No drainage crossings that require additional State or Federal approval are being crossed.
  - b. A biological review by the BLM in the spring will be necessary to confirm the presence of threatened and endangered flora and fauna species.
  - c. No raptor habitat is known to exist within 1 mile of the proposed wellsite.

13. Operator's Representative and Certification

<u>Title</u>	<u>Name</u>	<u>Office Phone</u>
Company Representative (Roosevelt)	Mitchiel Hall	1-435-722-4521
Company Representative (Oklahoma)	Carla Christian	1-405-749-5263
Agent for Dominion	Don Hamilton	1-435-637-4075

Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exists; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Dominion Exploration & Production, Inc. and its contractors and subcontractors in conformity with this APD package and the terms and conditions under which it is approved. I also certify responsibility for the operations conducted on that portion of the leased lands associated with this application, with bond coverage being provided under Dominion's BLM bond. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Signature: Don Hamilton Date: 5-9-05

DOMINION EXPLR. & PROD., INC.  
HCU #14-33F, #11-33F, & #13-33F ✓  
SECTION 33, T10S, R20E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 9.1 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN RIGHT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 2.8 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN LEFT AND PROCEED IN A SOUTHWESTERLY, THEN SOUTHERLY DIRECTION APPROXIMATELY 4.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN RIGHT AND PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 0.45 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTH; TURN RIGHT AND PROCEED IN A NORTHERLY DIRECTION APPROXIMATELY 0.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING TWO-TRACK ROAD TO THE NORTHWEST; TURN RIGHT AND PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 0.3 MILES TO THE BEGINNING OF THE PROPOSED ACCESS FOR THE #10-28F TO THE NORTHWEST; FOLLOW ROAD FLAGS IN A NORTHWESTERLY, THEN WESTERLY, THEN NORTHERLY, THEN NORTHEASTERLY DIRECTION APPROXIMATELY 1.8 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE NORTHEAST; FOLLOW ROAD FLAGS IN A NORTHEASTERLY DIRECTION APPROXIMATELY 0.1 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 50.8 MILES.



# DOMINION EXPLR. & PROD., INC.

## LOCATION LAYOUT FOR

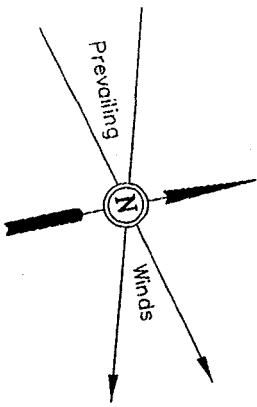
HCU #14-33F, #11-33F & #13-33F

C-2.5' SECTION 33, T10S, R20E, S.L.B.&M.

SW 1/4 SW 1/4

Proposed Access Road

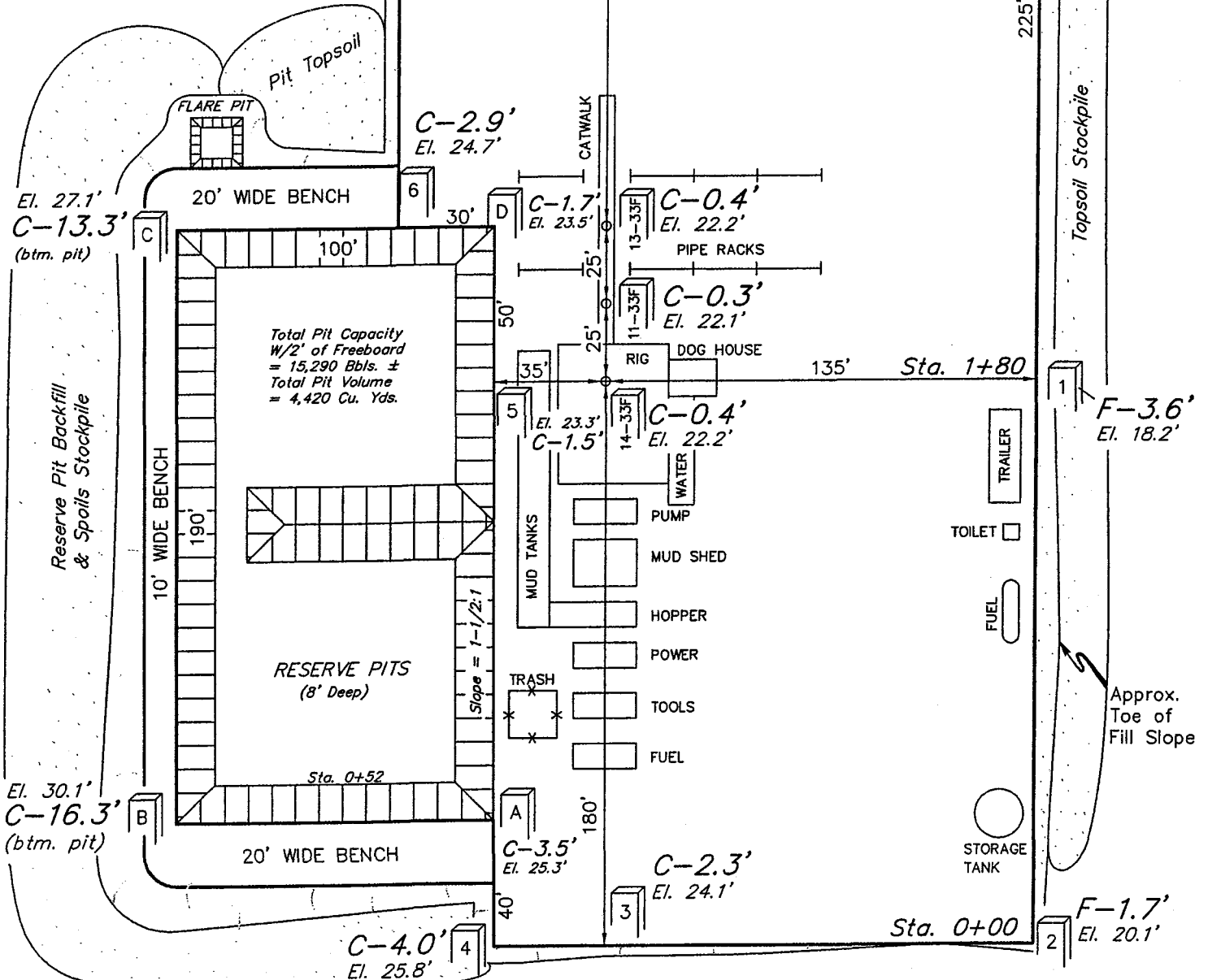
F-2.8'  
El. 19.0'



SCALE: 1" = 50'  
DATE: 3-16-05  
Drawn By: K.G.

### NOTE:

Flare Pit is to be located a min. of 100' from the Well Head.



# DOMINION EXPLR. & PROD., INC.

## TYPICAL CROSS SECTIONS FOR

HCU #14-33F, #11-33F & #13-33F ✓

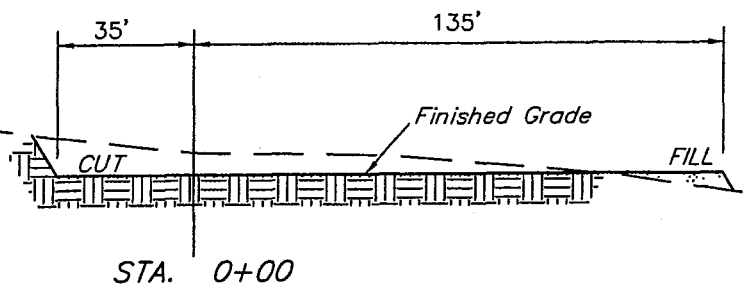
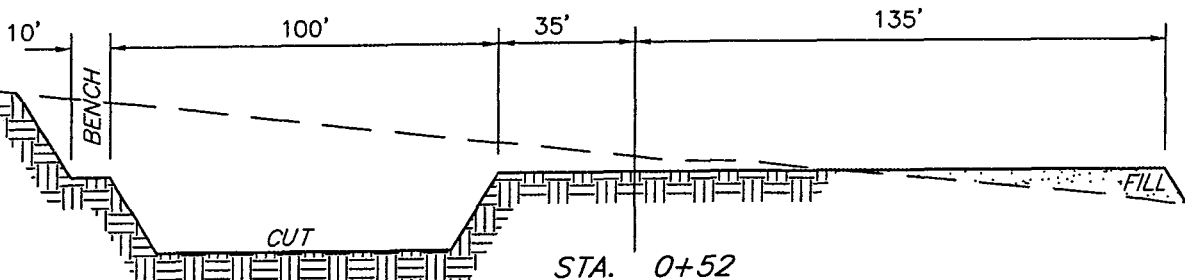
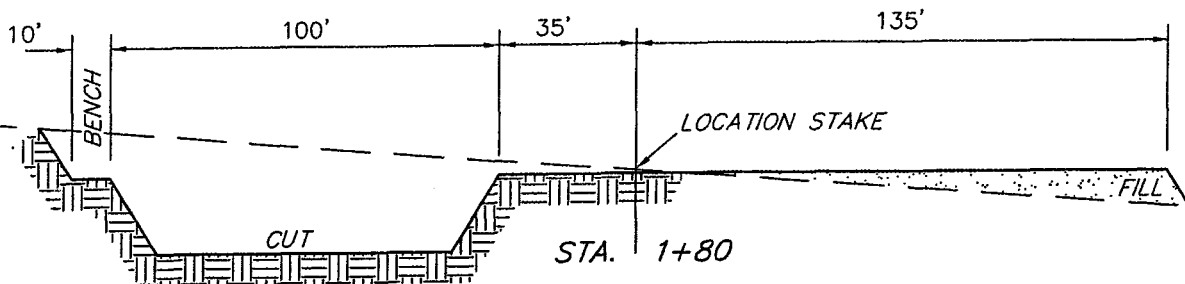
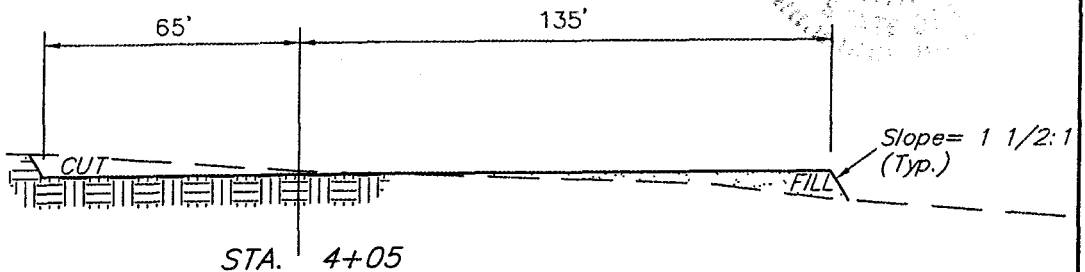
SECTION 33, T10S, R20E, S.L.B.&M.

SW 1/4 SW 1/4

1" = 20'  
X-Section  
Scale  
1" = 50'

DATE: 3-16-05

Drawn By: K.G.



### NOTE:

Topsoil should not be Stripped Below Finished Grade on Substructure Area.

### APPROXIMATE YARDAGES

#### CUT

(6") Topsoil Stripping = 2,030 Cu. Yds.

Remaining Location = 9,400 Cu. Yds.

TOTAL CUT = 11,430 CU.YDS.

FILL = 4,130 CU.YDS.

### \* NOTE:

FILL QUANTITY INCLUDES 5% FOR COMPACTION

EXCESS MATERIAL = 7,300 Cu. Yds.

Topsoil & Pit Backfill = 4,240 Cu. Yds.

(1/2 Pit Vol.)

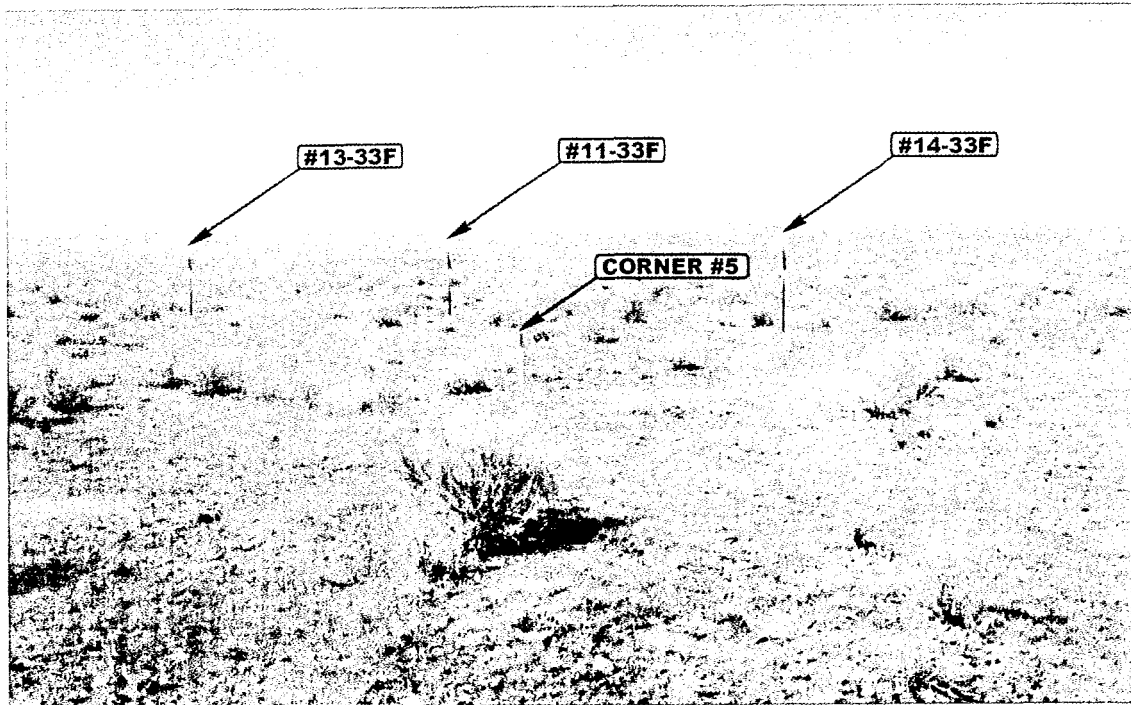
EXCESS UNBALANCE = 3,060 Cu. Yds.

(After Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING

85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1077

**DOMINION EXPLR. & PROD., INC.**  
**HCU #14-33F, #11-33F, & #13-33F**  
**LOCATED IN UINTAH COUNTY, UTAH**  
**SECTION 33, T10S, R20E, S.L.B.&M.**



**PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKES**

**CAMERA ANGLE: NORTHEASTERLY**



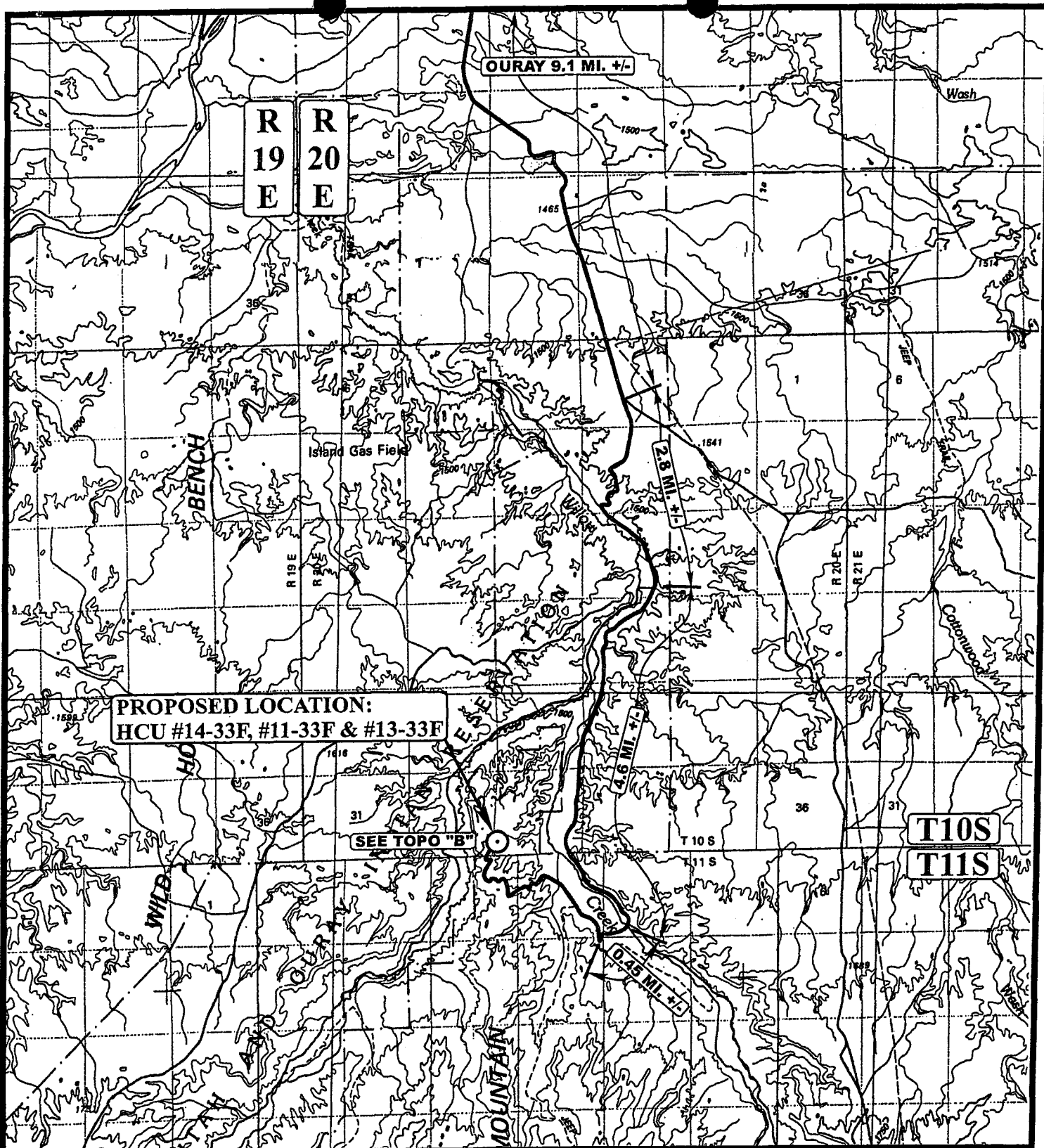
**PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS**

**CAMERA ANGLE: NORTHEASTERLY**



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 435-789-1017 uels@uelsinc.com

LOCATION PHOTOS			03	09	05	PHOTO
			MONTH	DAY	YEAR	
TAKEN BY: N.H.	DRAWN BY: C.P.	REVISED: 00-00-00				



**PROPOSED LOCATION:**  
HCU #14-33F, #11-33F & #13-33F

SEE TOPO "B"

**T10S**  
**T11S**

**LEGEND:**

○ PROPOSED LOCATION

**DOMINION EXPLR. & PROD., INC.**

HCU #14-33F, #11-33F, & #13-33F ✓  
SECTION 33, T10S, R20E, S.L.B.&M.  
SW 1/4 SW 1/4

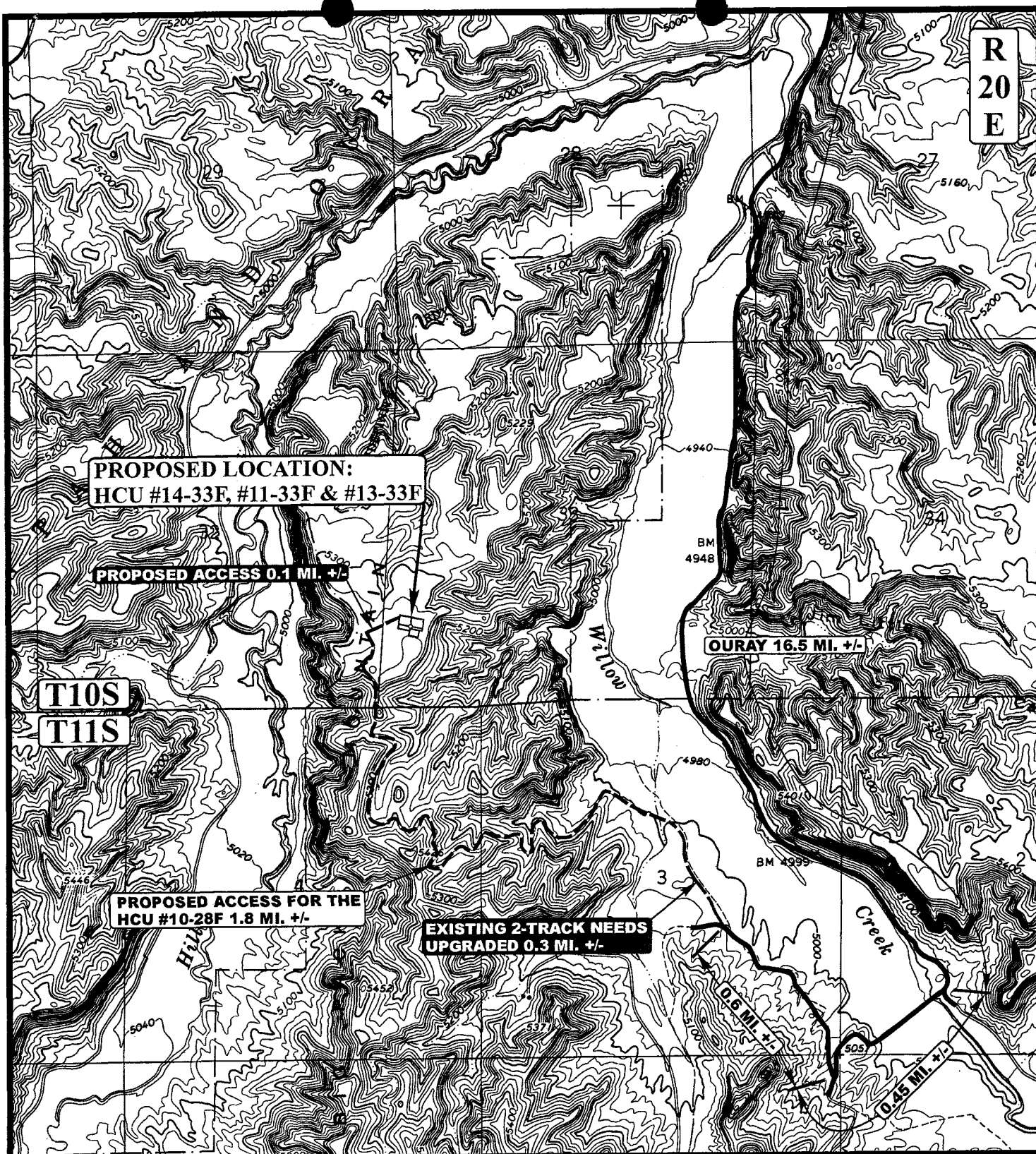


Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813



**TOPOGRAPHIC** 03 09 05  
**MAP** MONTH DAY YEAR  
SCALE: 1:100,000 DRAWN BY: C.P. REVISED: 00-00-00





# **LEGEND:**

- EXISTING ROAD
- - - - - PROPOSED ACCESS ROAD
- - - - - EXISTING 2-TRACK NEEDS UPGRADED

## **DOMINION EXPLR. & PROD., INC.**

HCU #14-33F, #11-33F, & #13-33F ✓  
 SECTION 33, T10S, R20E, S.L.B.&M.  
 SW 1/4 SW 1/4



Uintah Engineering & Land Surveying  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813



**TOPOGRAPHIC**  
**MAP**

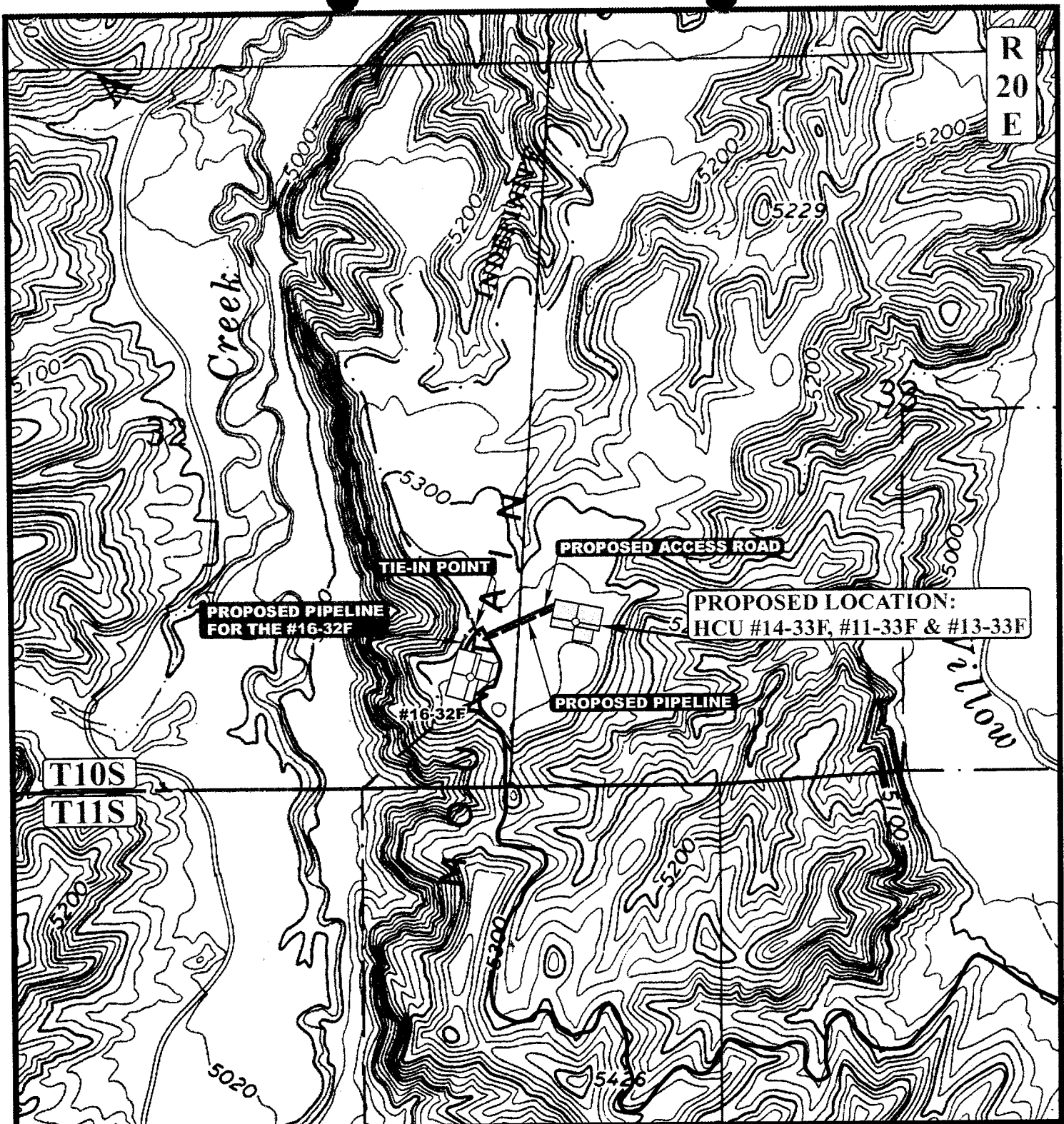
**03** **09** **05**  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: C.P. REVISED: 00-00-00

**B**  
**TOPO**







APPROXIMATE TOTAL PIPELINE DISTANCE = 536' +/-

**LEGEND:**

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- PROPOSED PIPELINE
- PROPOSED PIPELINE (SERVICING OTHER WELLS)



**DOMINION EXPLR. & PROD., INC.**

HCU #14-33F, #11-33F, & #13-33F ✓  
SECTION 33, T10S, R20E, S.L.B.&M.  
SW 1/4 SW 1/4



Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

TOPOGRAPHIC  
MAP

03 09 05  
MONTH DAY YEAR

SCALE: 1" = 1000' DRAWN BY: C.P.

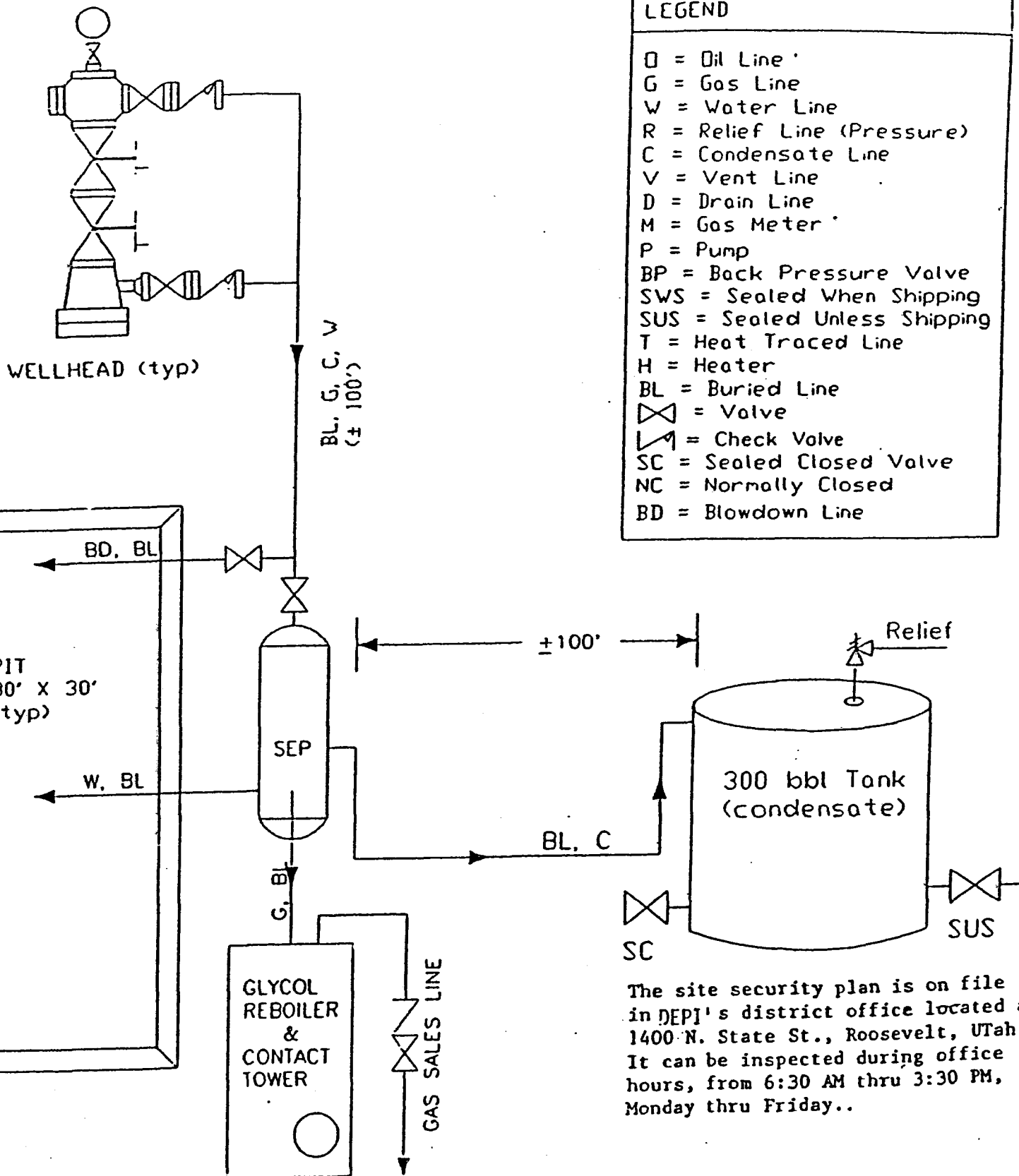
REVISED: 00-00-00



CONFIDENTIAL

# LEGEND

O = Oil Line  
 G = Gas Line  
 W = Water Line  
 R = Relief Line (Pressure)  
 C = Condensate Line  
 V = Vent Line  
 D = Drain Line  
 M = Gas Meter  
 P = Pump  
 BP = Back Pressure Valve  
 SWS = Sealed When Shipping  
 SUS = Sealed Unless Shipping  
 T = Heat Traced Line  
 H = Heater  
 BL = Buried Line  
 X = Valve  
 / = Check Valve  
 SC = Sealed Closed Valve  
 NC = Normally Closed  
 BD = Blowdown Line



The site security plan is on file in DEPI's district office located at 1400 N. State St., Roosevelt, Utah. It can be inspected during office hours, from 6:30 AM thru 3:30 PM, Monday thru Friday..

DOMINION EXPLORATION & PRODUCTION, INC.

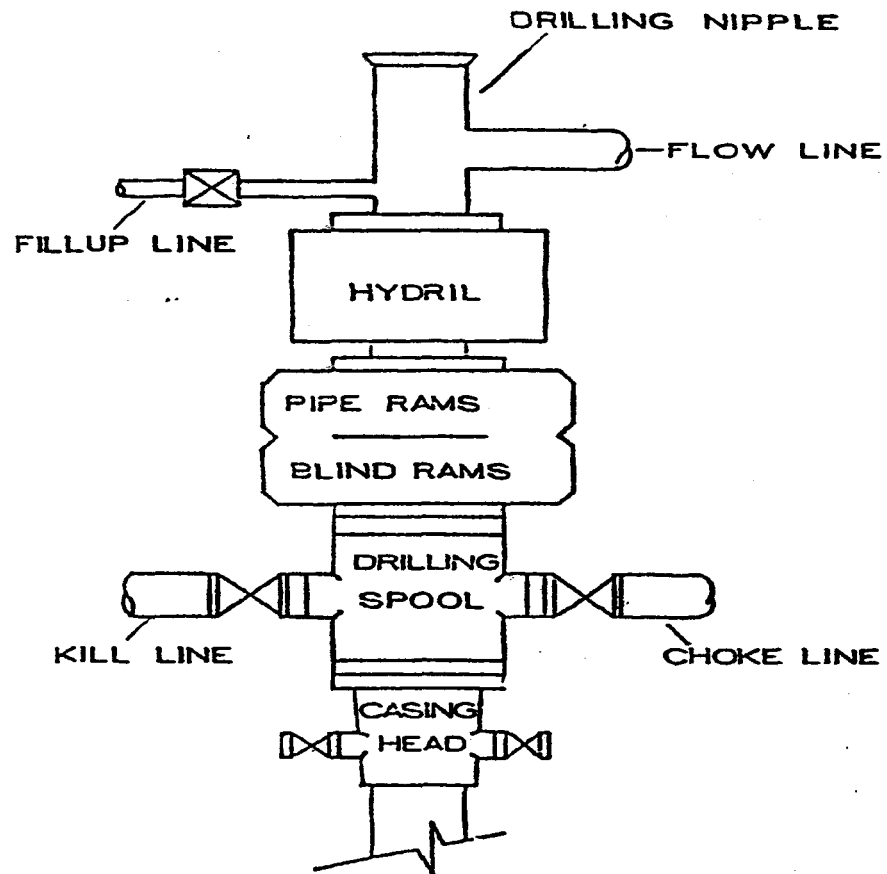
not to scale

date: / /

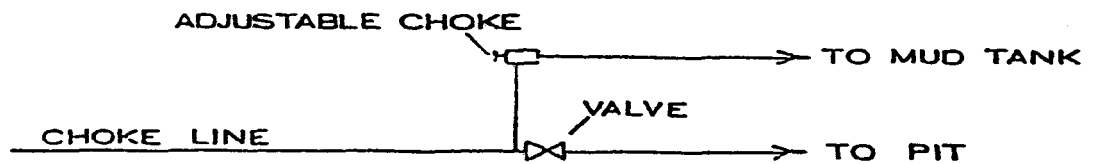
TYPICAL FLOW DIAGRAM



## BOP STACK



## CHOKE MANIFOLD



004

WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 05/11/2005

API NO. ASSIGNED: 43-047-36685

WELL NAME: HCU 13-33F

OPERATOR: DOMINION EXPL &amp; PROD ( N1095 )

CONTACT: DON HAMILTON

PHONE NUMBER: 435-650-1886

## PROPOSED LOCATION:

SWSW 33 100S 200E

SURFACE: 1214 FSL 0356 FWL

SWSW BOTTOM: 0700 FSL 0800 FWL

UINTAH

NATURAL BUTTES ( 630 )

LEASE TYPE: 1 - Federal

LEASE NUMBER: U-28203

SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: MVRD

COALBED METHANE WELL? NO

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LATITUDE: 39.89976

LONGITUDE: -109.6780

## RECEIVED AND/OR REVIEWED:

☒ Plat☒ Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. 76S630500330 )☒ Potash (Y/N)☒ Oil Shale 190-5 (B) or 190-3 or 190-13☒ Water Permit  
(No. 43-10447 )☒ RDCC Review (Y/N)  
(Date: )☒ Fee Surf Agreement (Y/N)

## LOCATION AND SITING:

R649-2-3.

Unit HILL CREEK

R649-3-2. General

Siting: 460 From Qtr/Qtr &amp; 920' Between Wells

R649-3-3. Exception

☒ Drilling Unit

Board Cause No: 197-11

Eff Date: 8-17-2008

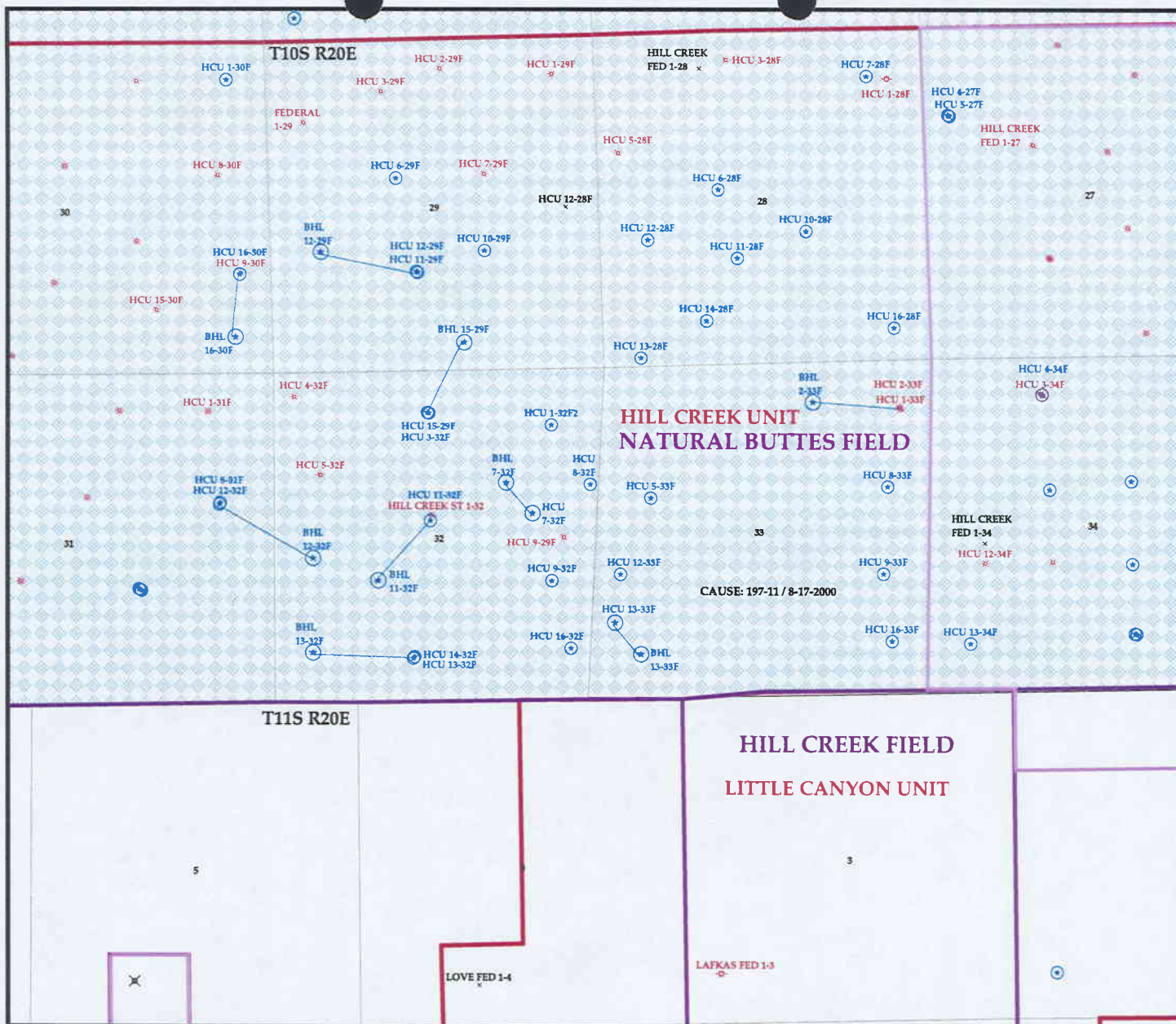
Siting: Suspends General Siting

☒ R649-3-11. Directional Drill

## COMMENTS:

## STIPULATIONS:

1- Federal Approval  
2- Oil Shale



OPERATOR: DOMINION EXPL & PROD (N1095)

SEC: 32 & 33 T. 10S R. 20E

FIELD: NATURAL BUTTES (630)

COUNTY: UINTAH

CAUSE: 197-11 / 8-17-2000

#### Wells

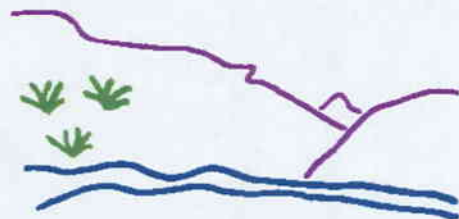
- ★ GAS INJECTION
- GAS STORAGE
- × LOCATION ABANDONED
- ⊙ NEW LOCATION
- ⊕ PLUGGED & ABANDONED
- ★ PRODUCING GAS
- PRODUCING OIL
- SHUT-IN GAS
- SHUT-IN OIL
- × TEMP. ABANDONED
- TEST WELL
- ⊙ WATER INJECTION
- ⊙ WATER SUPPLY
- ⊙ WATER DISPOSAL

#### Units.shp

- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PENDING
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

#### Fields.shp

- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED



Utah Oil Gas and Mining



PREPARED BY: DIANA WHITNEY  
DATE: 11-MAY-2005

# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:

3160

(UT-922)

May 17, 2005

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2005 Plan of Development Hill Creek Unit  
Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2005 within the Hill Creek Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ MesaVerde)		
43-047-36685	HCU 13-33F	Sec 33 T10S R20E 1214 FSL 0356 FWL
	BHL	Sec 33 T10S R20E 0700 FSL 0800 FWL
43-047-36684	HCU 7-32F	Sec 32 T10S R20E 2302 FNL 1046 FEL
	BHL	Sec 32 T10S R20E 1800 FNL 1500 FEL

This office has no objections to permitting the wells at this time.

/s/ Michael L. Coulthard

bcc: File - Hill Creek Unit  
Division of Oil Gas and Mining  
Central Files  
Agr. Sec. Chron  
Fluid Chron

MCoulthard:mc:5-17-05



# State of Utah

## Department of Natural Resources

MICHAEL R. STYLER  
*Executive Director*

### Division of Oil, Gas & Mining

JOHN R. BAZA  
*Division Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

May 17, 2005

Dominion Exploration & Production, Inc.  
14000 Quail Springs Parkway, Suite 600  
Oklahoma City, OK 73134

Re: Hill Creek Unit 13-33F Well, Surface Location 1214' FSL, 356' FWL,  
SW SW, Sec. 33, T. 10 South, R. 20 East, Bottom Location 700' FSL,  
800' FWL, SW SW, Sec. 33, T. 10 South, R. 20 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-36685.

Sincerely,

Gil Hunt  
Acting Associate Director

pab  
Enclosures

cc: Uintah County Assessor  
Bureau of Land Management, Vernal District Office

Operator: Dominion Exploration & Production, Inc.  
Well Name & Number Hill Creek Unit 13-33F  
API Number: 43-047-36685  
Lease: U-28203

Surface Location: SW SW      Sec. 33      T. 10 South      R. 20 East  
Bottom Location: SW SW      Sec. 33      T. 10 South      R. 20 East

### Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dan Jarvis at (801) 538-5338

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.

5. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

6. In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993**SUNDRY NOTICES AND REPORTS ON WELLS**Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT--" for such proposals**SUBMIT IN TRIPLICATE**

## 1. Type of Well

☐ Oil ☒ Gas ☐

## 2. Name of Operator

Dominion Exploration &amp; Production, Inc.

## 3. Address and Telephone No.

14000 Quail Springs Parkway, Suite 600, Oklahoma City, OK 73134, 405-749-5263

## 4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Surface: 1,214' FSL & 356' FWL, SW/4 SW/4,  
Target: 700' FSL & 800' FWL, SW/4 SW/4,Section 33, T10S, R20E, SLB&M  
Section 33, T10S, R20E, SLB&M5. Lease Designation and Serial No.  
U-282036. If Indian, Allottee or Tribe Name  
N/A7. If Unit or CA, Agreement Designation  
Hill Creek Unit8. Well Name and No.  
HCU 13-33F9. API Well No.  
43-047-3668510. Field and Pool, or Exploratory Area  
Natural Buttes11. County or Parish, State  
Uintah, Utah12. **CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

## TYPE OF SUBMISSION

- ☐
- Notice of Intent
- 
- ☒
- Subsequent Report
- 
- ☐
- Final Abandonment Notice

## TYPE OF ACTION

- |  |   |
|--|---|
| <input type="checkbox"/> Change of Name<br><input type="checkbox"/> Recompletion<br><input type="checkbox"/> Plugging Back<br><input type="checkbox"/> Casing Repair<br><input type="checkbox"/> Altering Casing<br><input checked="" type="checkbox"/> Location layout change | <input type="checkbox"/> Change of Plans<br><input type="checkbox"/> New Construction<br><input type="checkbox"/> Non-Routine Fracturing<br><input type="checkbox"/> Water Shut-Off<br><input type="checkbox"/> Conversion to Injection<br><input type="checkbox"/> Dispose Water |
|--|---|

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

**The location layout has changed for the HCU 13-33F following restaking of the associated directional wells to other locations.**

**Attached please find an updated plat package that reflects the new location layout to replace Exhibits "A" and "B" of the previously submitted APD package.**

Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY

RECEIVED  
JUL 11 2005

DIV. OF OIL, GAS & MINING  
**FILE COPY**

4. I hereby certify that the foregoing is true and correct

Signed Don Hamilton Don Hamilton Title Agent for Dominion Date July 6, 2005

(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
Conditions of approval, if any:

T10S, R20E, S.L.B.&M.

1928 Brass Cap  
Pile of Stones

S89°11'09"W - 2631.49' (Meas.)

S89°09'00"W - 2630.14' (Meas.)

1928 Brass Cap  
Pile of Stones

1928 Brass Cap  
0.8' High, Pile  
of Stones

N03°32'29"E - 2658.47' (Meas.)

N01°19'12"E - 2644.51' (Meas.)

1928 Brass Cap  
Pile of Stones

33

1928 Brass Cap  
0.8' High, Pile  
of Stones

HCU #13-33F

Elev. Ungraded Ground = 5322'

N03°33'12"E - 2654.00' (Meas.)

N01°18'49"E - 2645.67' (Meas.)

Bottom  
Hole

A.P., Set Stone,  
Pile of Stones

1928 Brass Cap  
0.4' High, E-W  
Fenceline, Set  
Marked Stone

1928 Brass Cap  
1.3' High, Pile  
of Stones

T10S  
T11S

S89°51'17"W -  
1532.82' (Meas.)

S86°17'49"W -  
1318.46' (Meas.)

S89°58'51"W - 2619.67' (Meas.)

1928 Brass Cap  
Pile of Stones

# LEGEND:

└─┘ = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

## BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.

(NAD 83)

LATITUDE = 39°53'59.03" (39.899731)

LONGITUDE = 109°40'43.22" (109.678672)

(NAD 27)

LATITUDE = 39°53'59.16" (39.899767)

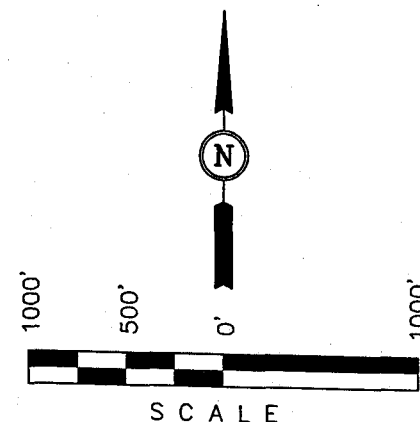
LONGITUDE = 109°40'40.73" (109.677981)

DOMINION EXPLR. & PROD., INC.

Well location, HCU #13-33F, located as shown  
in the SW 1/4 SW 1/4 of Section 33, T10S,  
R20E, S.L.B.&M. Uintah County Utah.

## BASIS OF ELEVATION

SPOT ELEVATION AT THE SOUTHWEST CORNER OF SECTION  
20, T10S, R20E, S.L.B.&M. TAKEN FROM THE BIG PACK  
MTN. NW QUADRANGLE, UTAH, UTAH COUNTY, 7.5  
MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE  
UNITED STATES DEPARTMENT OF THE INTERIOR,  
GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS  
BEING 5251 FEET.



## CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM  
FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY  
SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE  
BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(435) 789-1017

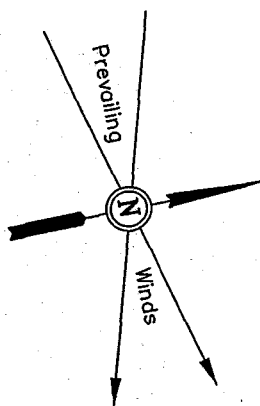
SCALE 1" = 1000'	DATE SURVEYED: 3-7-05	DATE DRAWN: 3-16-05
PARTY N.H. A.S. K.G.	REFERENCES G.L.O. PLAT	
WEATHER COOL	FILE DOMINION EXPLR. & PROD., INC.	



# DOMINION EXPLR. & PROD., INC.

## LOCATION LAYOUT FOR

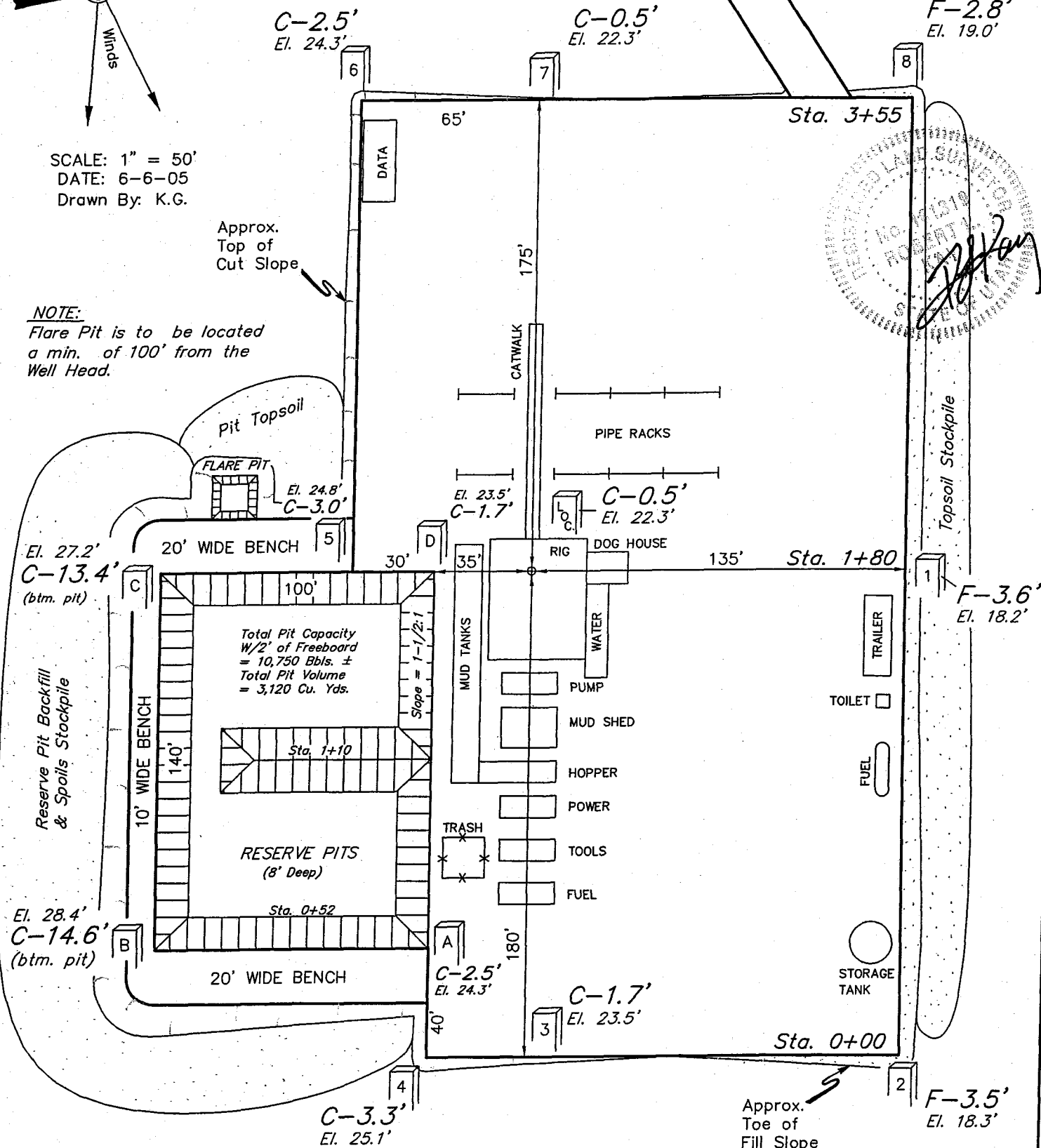
HCU #13-33F  
SECTION 33, T10S, R20E, S.L.B.&M.  
1214' FSL 356' FWL



SCALE: 1" = 50'  
DATE: 6-6-05  
Drawn By: K.G.

### NOTE:

Flare Pit is to be located  
a min. of 100' from the  
Well Head.



Elev. Ungraded Ground at Location Stake = 5322.3'  
Elev. Graded Ground at Location Stake = 5321.8'

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

# UNION EXPLR. & PROD., INC.

## TYPICAL CROSS SECTIONS FOR

HCU #13-33F

SECTION 33, T10S, R20E, S.L.B.&M.

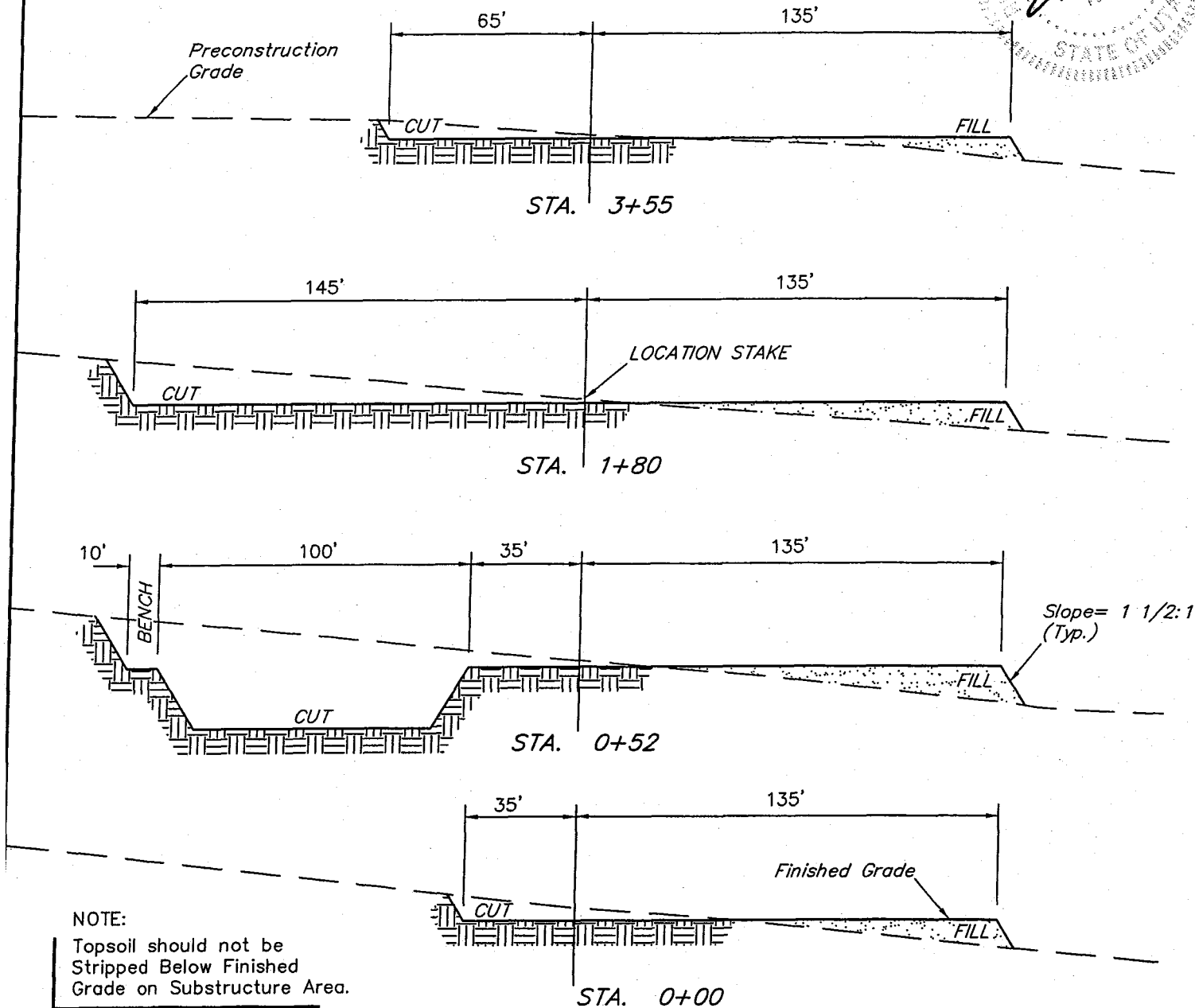
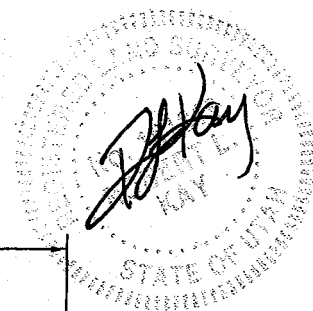
1214' FSL 356' FWL

1" = 20'  
X-Section  
Scale

1" = 50'

DATE: 6-6-05

Drawn By: K.G.



### NOTE:

Topsoil should not be Stripped Below Finished Grade on Substructure Area.

### \* NOTE:

FILL QUANTITY INCLUDES 5% FOR COMPACTION

### APPROXIMATE YARDAGES

#### CUT

(6") Topsoil Stripping = 1,750 Cu. Yds.

Remaining Location = 6,660 Cu. Yds.

TOTAL CUT = 8,410 CU.YDS.

FILL = 3,900 CU.YDS.

EXCESS MATERIAL

= 4,510 Cu. Yds.

Topsoil & Pit Backfill (1/2 Pit Vol.)

= 3,310 Cu. Yds.

EXCESS UNBALANCE (After Rehabilitation)

= 1,200 Cu. Yds.

UINTAH ENGINEERING & LAND SURVEYING

85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

# DOMINION EXPLR. & PROD., INC.

HCU #13-33F

LOCATED IN UINTAH COUNTY, UTAH  
SECTION 33, T10S, R20E, S.L.B.&M.

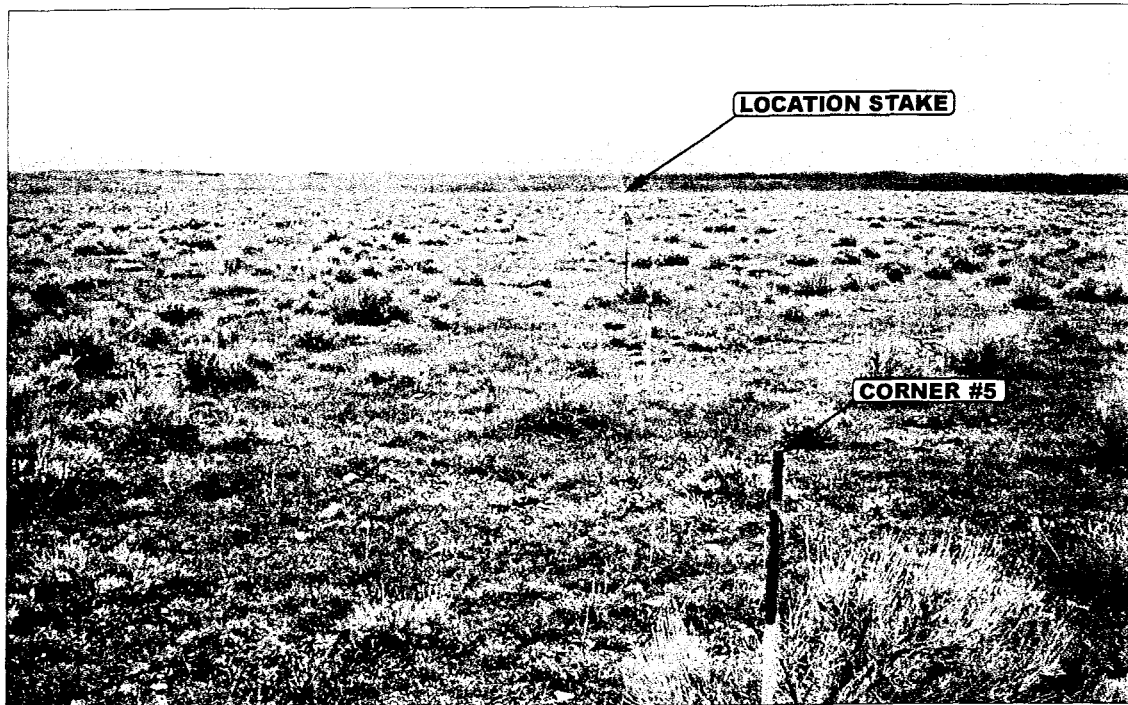


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHEASTERLY

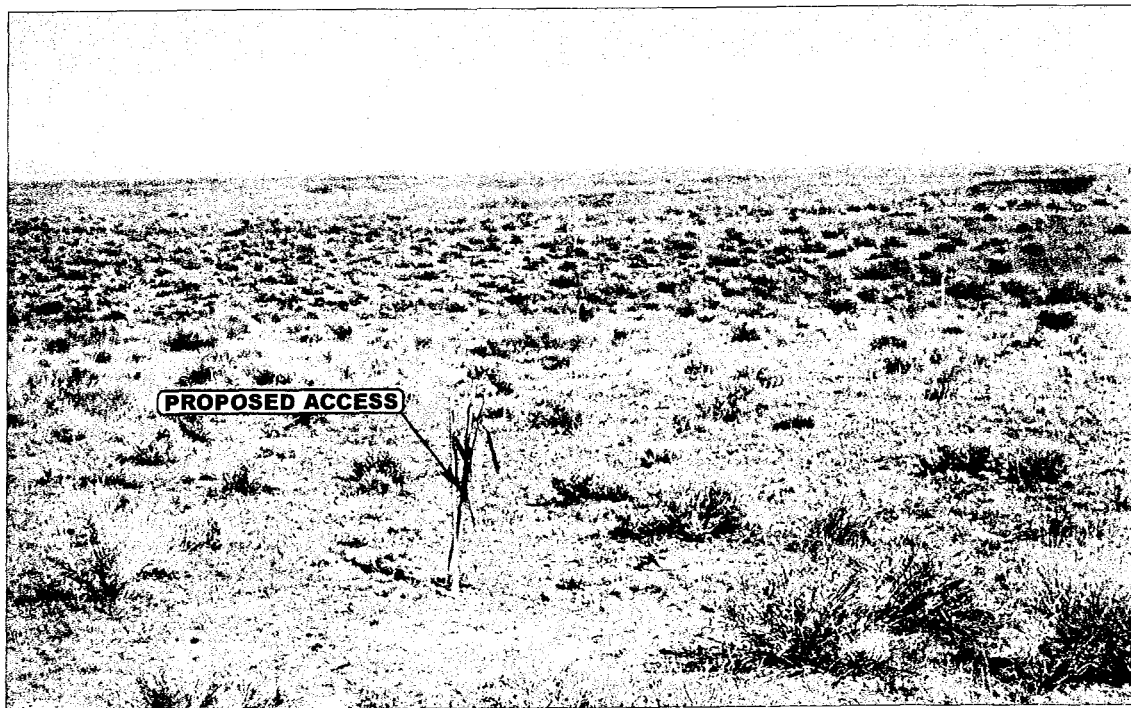


PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: NORTHEASTERLY



- Since 1964 -

**E&L**S

Uintah Engineering & Land Surveying

85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

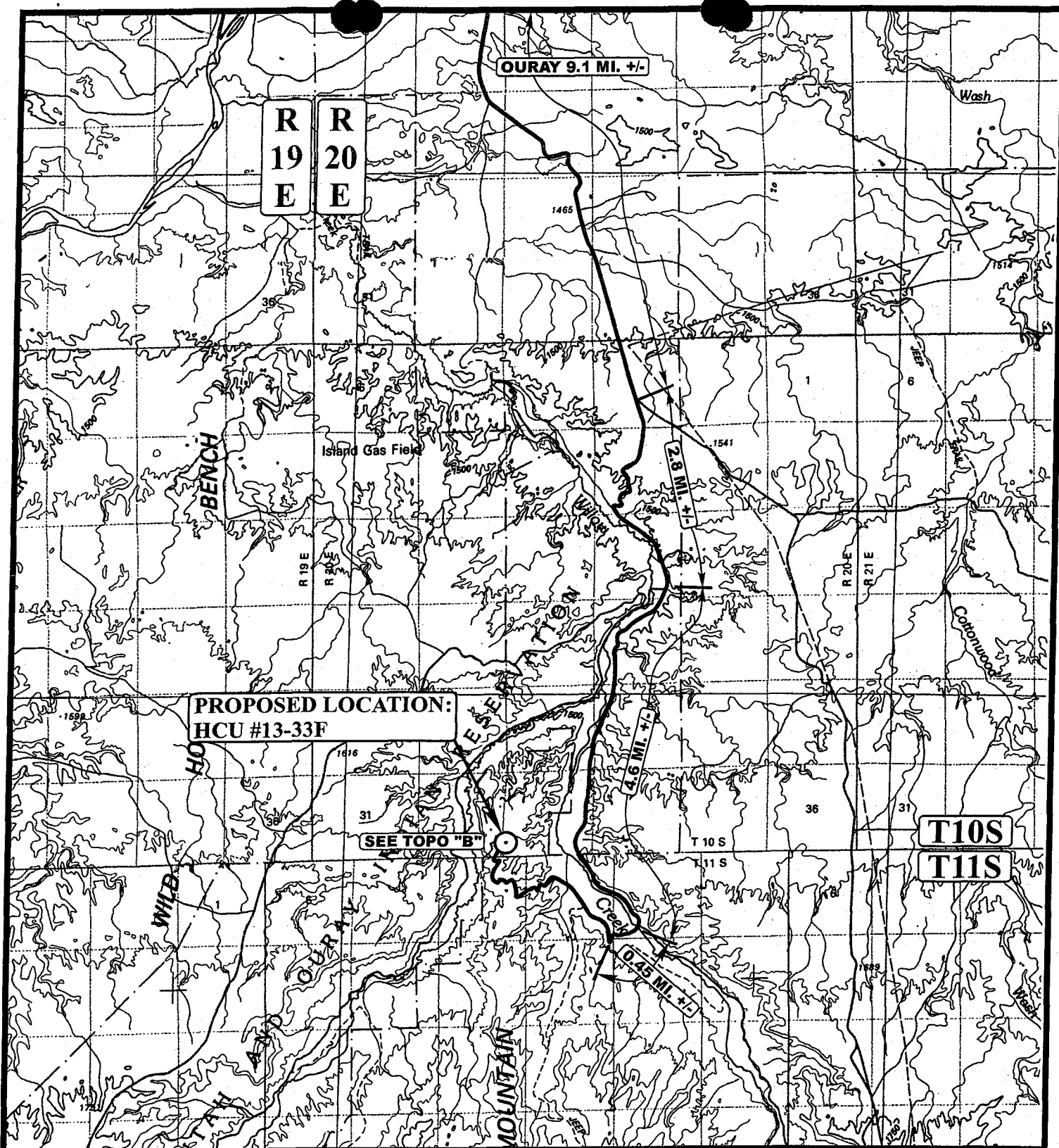
03 09 05  
MONTH DAY YEAR

PHOTO

TAKEN BY: N.H.

DRAWN BY: C.P.

REVISED: 05-31-05



# **LEGEND:**

○ PROPOSED LOCATION



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813



## **DOMINION EXPLR. & PROD., INC.**

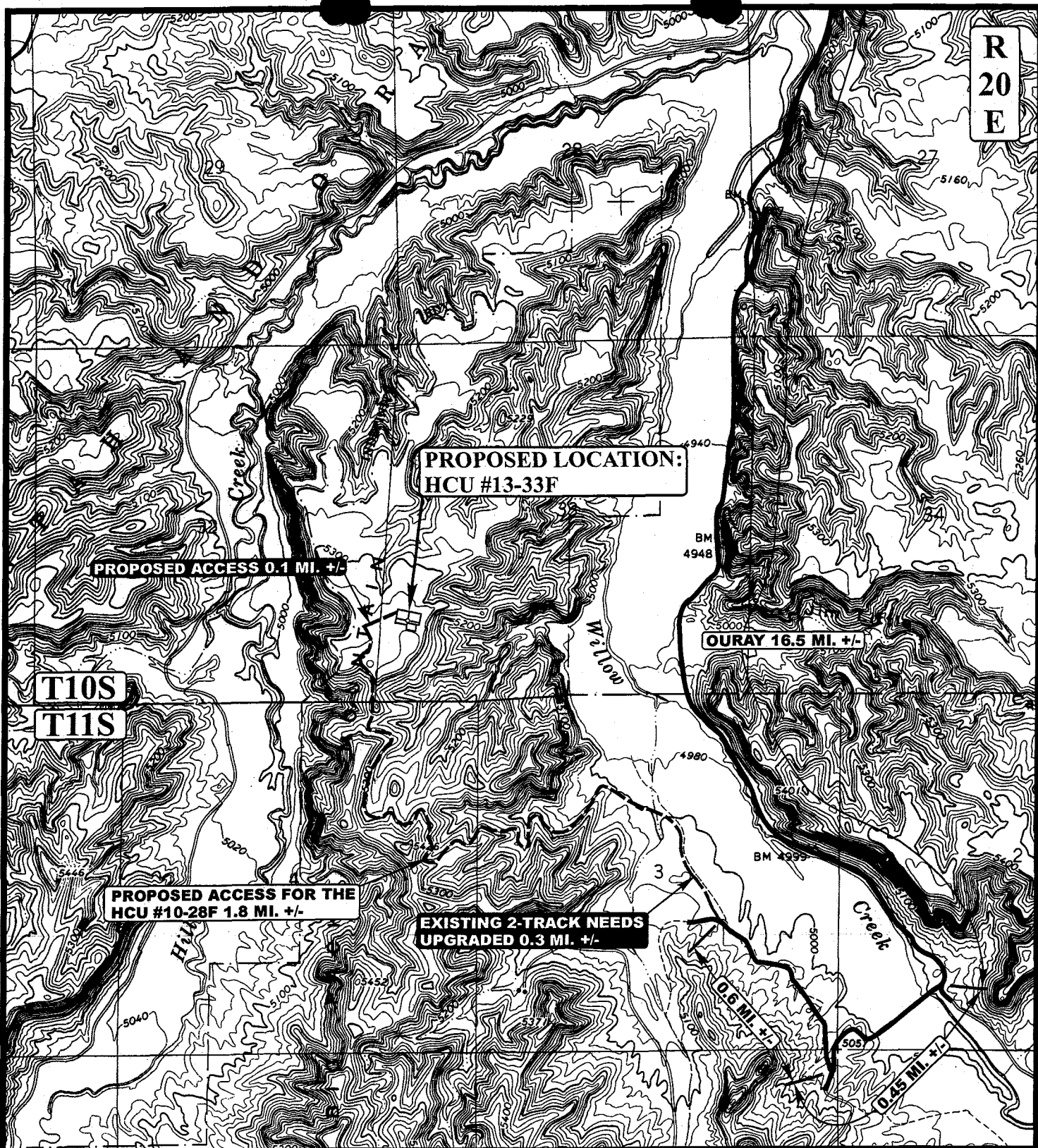
HCU #13-33F  
 SECTION 33, T10S, R20E, S.L.B.&M.  
 1214' FSL 356' FWL

**TOPOGRAPHIC**  
**MAP**

**03** **09** **05**  
 MONTH DAY YEAR

SCALE: 1:100,000 DRAWN BY: C.P. REVISED: 05-31-05





# LEGEND:

- EXISTING ROAD
- PROPOSED ACCESS ROAD
- EXISTING 2-TRACK NEEDS UPGRADED



Uintah Engineering & Land Surveying  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

# DOMINION EXPLR. & PROD., INC.

HCU #13-33F  
 SECTION 33, T10S, R20E, S.L.B.&M.  
 1214' FSL 356' FWL

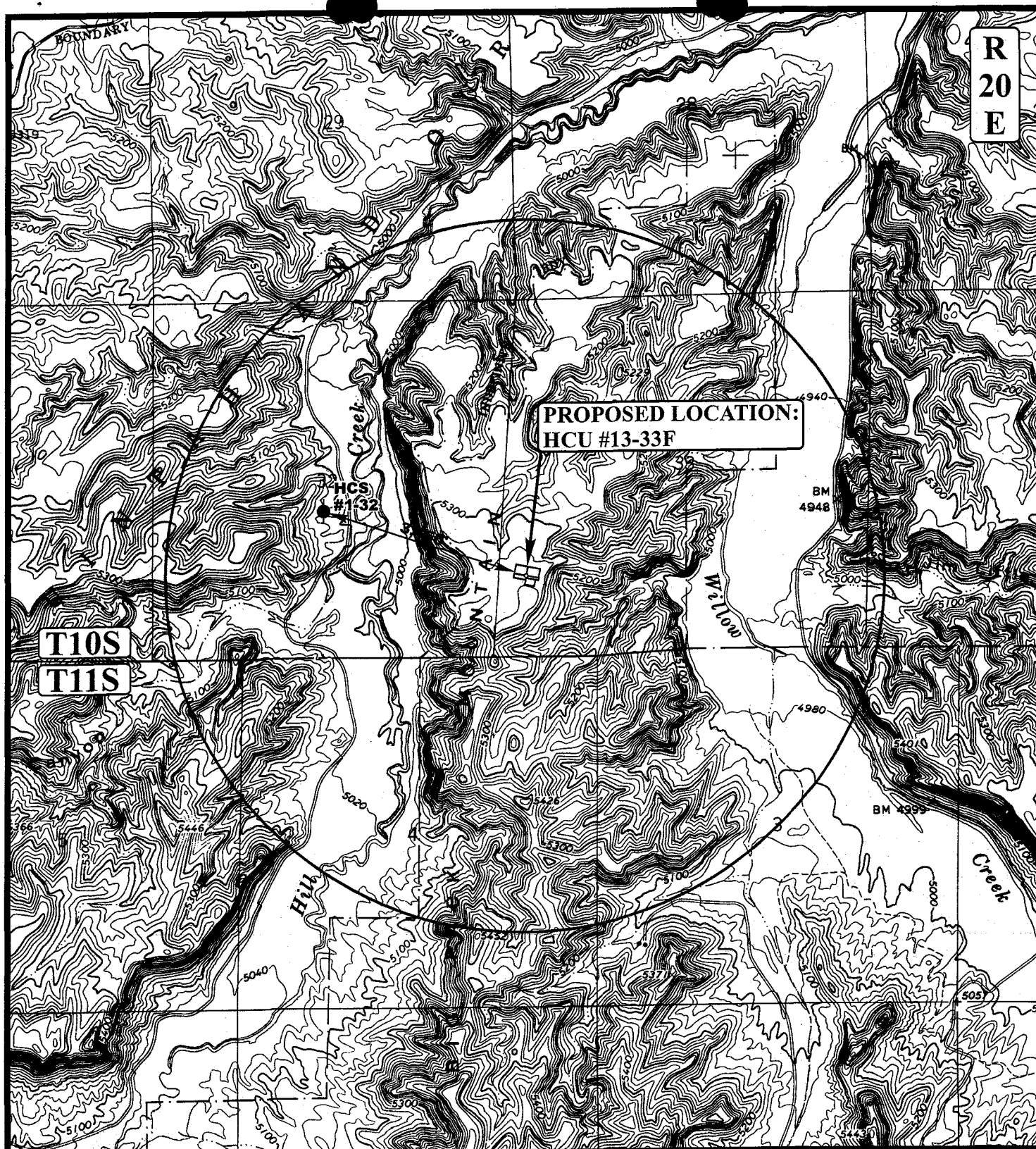
TOPOGRAPHIC  
 MAP

03 09 05  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: C.P. REVISED: 05-31-05

B  
 TOPO





# **LEGEND:**

- |                   |                         |
|-------------------|-------------------------|
| ○ DISPOSAL WELLS  | ○ WATER WELLS           |
| ● PRODUCING WELLS | ● ABANDONED WELLS       |
| ● SHUT IN WELLS   | ● TEMPORARILY ABANDONED |



Uintah Engineering & Land Surveying  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

## **DOMINION EXPLR. & PROD., INC.**

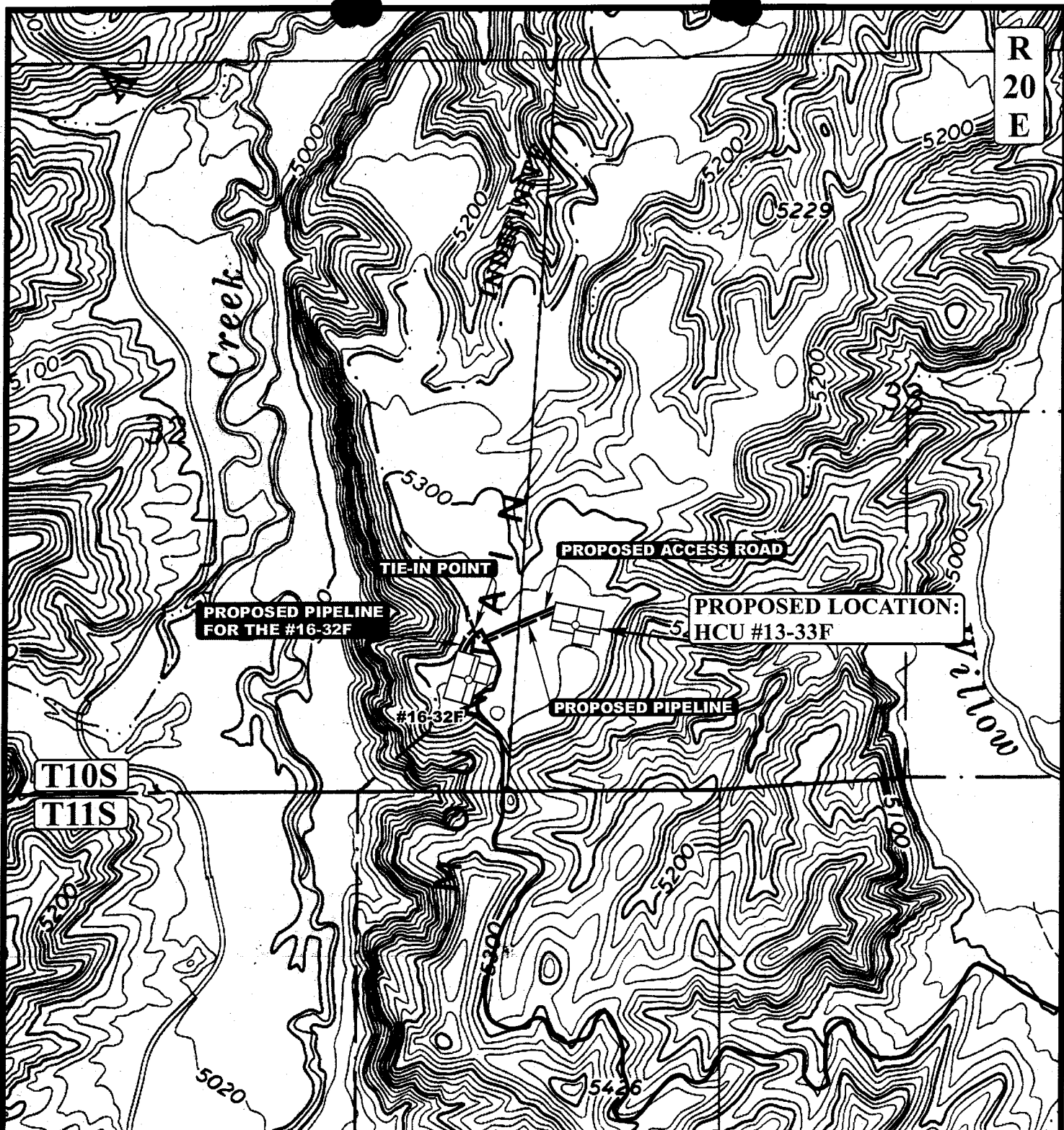
HCU #13-33F  
 SECTION 33, T10S, R20E, S.L.B.&M.  
 1214' FSL 356' FWL

TOPOGRAPHIC  
 MAP

03	09	05
MONTH	DAY	YEAR

SCALE: 1" = 2000'    DRAWN BY: C.P.    REVISED: 05-31-05





APPROXIMATE TOTAL PIPELINE DISTANCE = 536' +/-

# LEGEND:

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- PROPOSED PIPELINE
- PROPOSED PIPELINE (SERVICING OTHER WELLS)



DOMINION EXPLR. & PROD., INC.

HCU #13-33F

SECTION 33, T10S, R20E, S.L.B.&M.

1214' FSL 356' FWL



Utah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

TOPOGRAPHIC  
MAP

03 09 05  
MONTH DAY YEAR

SCALE: 1" = 1000' DRAWN BY: C.P. REVISED: 05-31-05



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

MAY 11 2005

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL  
WELL ☐

GAS  
WELL ☒

OTHER

SINGLE  
ZONE ☒

MULTIPLE  
ZONE ☐

2. NAME OF OPERATOR

Dominion Exploration & Production, Inc.

3. ADDRESS AND TELEPHONE NO.

14000 Quail Springs Parkway, Suite 600, Oklahoma City, OK 73134, 405-749-5263

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

1,214' FSL & 356' FWL, SW/4 SW/4,

Section 33

At proposed prod. zone

700' FSL & 800' FWL, SW/4 SW/4,

Section 33

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

13.03 miles south of Ouray, Utah

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drig. unit line, if any)

356'

16. NO. OF ACRES IN LEASE

1,880

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40 acres

18. DISTANCE FROM PROPOSED  
LOCATION TO NEAREST WELL,  
DRILLING, COMPLETED, OR  
APPLIED FOR, ON THIS LEASE, FT.

25'

19. PROPOSED DEPTH

8,000'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

5,322' GR

22. APPROX. DATE WORK WILL START\*

September 15, 2005

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8" H-40 ST&C	48#	500'	450 sks "C" Cement with additives (see Drilling Plan)
12-1/4"	9-5/8" J-55 LT&C	36#	2,800'	300 sacks Lead and 390 sacks Tail (see Drilling Plan)
7-7/8"	5-1/2" Mav-80 LT&C	17#	8,000'	90 sacks Lead and 600 sacks Tail (see Drilling Plan)

Bond Information:

Bond coverage is provided by Travelers Casualty and Surety Company of America, Bond #76S 63050 0330

Other Information:

Drilling Plan and Surface Use Plan are attached.

Dominion requests that this complete application for permit to drill be held confidential.

A request for exception to spacing (R649-3-11) is hereby requested based on topography since the well is located within 460' of the drilling unit boundary. Dominion Exploration & Production, Inc. is the only owner and operator within 460' of the proposed well and all points along the intended well bore path.

Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY

RECEIVED

MAR 03 2006

ORIGINAL

CONFIDENTIAL

DIV. OF OIL, GAS & MINING

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED Don Hamilton Don Hamilton TITLE Agent for Dominion

DATE May 9, 2005

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. CONDITIONS OF APPROVAL, IF ANY.

APPROVED BY Howard B. Leary TITLE Assistant Field Manager  
Mineral Resources

DATE 02/29/2006

\*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001 makes it a crime for any person knowingly and willfully to make to any department or agency or the

NOTICE OF APPROVAL

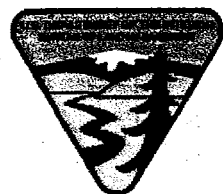
CONDITIONS OF APPROVAL ATTACHED





UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East VERNAL, UT 84078 (435) 781-4400



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

Company: Dominion Exploration & Production	Location: SWSW, Sec 33, T10S, R20E
Well No: HCU 13-33F	Lease No: UTU-28203
API No: 43-047-36685	Agreement: Hill Creek Unit

Petroleum Engineer:	Matt Baker	Office: 435-781-4490	Cell: 435-828-4470
Petroleum Engineer:	Michael Lee	Office: 435-781-4432	Cell: 435-828-7875
Supervisory Petroleum Technician:	Jamie Sparger	Office: 435-781-4502	Cell: 435-828-3913
Environmental Scientist:	Paul Buhler	Office: 435-781-4475	Cell: 435-828-4029
Environmental Scientist:	Karl Wright	Office: 435-781-4484	
Natural Resource Specialist:	Holly Villa	Office: 435-781-4404	
Natural Resource Specialist:	Melissa Hawk	Office: 435-781-4476	
After hours contact number: (435) 781-4513		FAX: (435) 781-4410	

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a one-year period. An additional year extension may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

Location Construction (Notify Karl Wright)	- Forty-Eight (48) hours prior to construction of location and access roads
Location Completion (Notify Karl Wright)	- Prior to moving on the drilling rig.
Spud Notice (Notify PE)	- Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Jamie Sparger SPT)	- Twenty-Four (24) hours prior to running casing and cementing all casing strings.
BOP & Related Equipment Tests (Notify Jamie Sparger SPT)	- Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify PE)	- Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

**SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

- Within 90 calendar days of the approval date for this Application for Permit to Drill (APD), the operator/lessee shall submit to the Authorized Officer (AO), on Sundry Notice Form 3160-5, an Interim Surface Reclamation Plan for surface disturbance on well pads, access roads, and pipelines. At a minimum, this will include the reshaping of the pad to the original contour to the extent possible; the respreading of the top soil up to the rig anchor points; and, the area reseeded using appropriate reclamation methods. The AO will provide written approval or concurrence within 30 calendar days of receipt.
- If paleontologic materials are uncovered during construction, the operator shall immediately stop work that might further disturb such materials and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation will be necessary for the discovered paleontologic material.
- Following well plugging and abandonment, the location, access roads, pipelines, and other facilities shall be reclaimed. All disturbed surfaces shall be reshaped to approximate the original contour; the top soil respread over the surface; and, the surface revegetated. The surface of approved staging areas where construction activities did not occur may require disking or ripping and reseeding.
- The following seed mixture shall be used:

	Type	lbs./acre
Shadscale	<i>Atriplex confertifolia</i>	3
Fourwing salt bush	<i>Atgriplex canescens</i>	3
Galleta grass	<i>Hilaria jamesii</i>	3
Gardners salt brush	<i>Atriplex gardneri</i>	3
** Seed shall be drilled; but if broadcasted double the pounds per acre used and work the solids mechanically to cover the seed.		

- Other reclamation methods including but not limited to mulching or soil treatments may be required on a site-specific basis.
- The pits will be lined with 16 ply or greater plastic liners, and padded with the appropriate layers of felt to prevent any punctures of the liner.
- The entire pad will be bermed, to deter any potential water flows from entering the pad and potentially carrying oil and/or gas products down the mountain into Willow Creek or Hill Creek and ultimately into the Green River.

## **DOWNHOLE CONDITIONS OF APPROVAL**

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

### **SITE SPECIFIC DOWNHOLE CONDITIONS OF APPROVAL**

- None

### **DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well. Any changes in operation must have prior approval from the BLM, Vernal Field Office Petroleum Engineers.
- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- **Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.**
- Blowout prevention equipment (BOPE) will remain in use until the well is completed or abandoned. Closing unit controls must remain unobstructed and readily accessible at all times. Choke manifolds must be located outside of the rig substructure.
- All BOPE components will be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests must be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test must be reported in the driller's log.
- BOP drills must be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- All shows of fresh water and minerals will be reported and protected. A sample will be taken of any water flows and a water analysis furnished the BLM, Vernal Field Office. All oil and gas shows will be adequately tested for commercial possibilities, reported, and protected.
- No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the BLM, Vernal Field Office. If operations are to be suspended

for more than 30 days, prior approval of the BLM, Vernal Field Office must be obtained and notification given before resumption of operations.

- Chronologic drilling progress reports must be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- Any change in the program must be approved by the BLM, Vernal Field Office. "Sundry Notices and Reports on Wells" (Form BLM 3160-5) must be filed for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.
- Emergency approval may be obtained orally, but such approval does not waive the written report requirement. Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, will require the filing of a suitable plan pursuant to Onshore Oil & Gas Order No. 1 of 43 CFR 3164.1 and prior approval by the BLM, Vernal Field Office.
- In accordance with 43 CFR 3162.4-3, this well must be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) will be submitted only when requested by the BLM, Vernal Field Office.
- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the BLM, Vernal Field Office.
- All measurement points shall be identified as point of sales or allocation for royalty determination prior to the installation of facilities.
- Oil and gas meters will be calibrated in place prior to any deliveries. The Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the BLM, Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM, Vernal Field Office within 30 days of installation or first production,

whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.

- This APD is approved subject to the requirement that, should the well be successfully completed for production, the BLM, Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and / or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas will be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from Field Office Petroleum Engineers.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events as defined in NTL3A, will be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires: November 30, 2000

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an**  
**abandoned well. Use Form 3160-3 (APD) for such proposals.**

**SUBMIT IN TRIPLICATE - Other Instructions on reverse side**

1. Type of Well

☐ Oil Well

☒

Gas Well

☐

Other

2. Name of Operator

Dominion Exploration & Production, Inc.

3a. Address

Suite 600

14000 Quail Springs Parkway, OKC, OK 73134

3b. Phone No. (include area code)

(405) 749-5263

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1214' FSL & 356' FWL, Sec. 33-10S-20E

5. Lease Serial No.

U-28203

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

Hill Creek Unit

8. Well Name and No.

HCU 13-33F

9. API Well No.

43-047-36685

10. Field and Pool, or Exploratory Area

Natural Buttes

11. County or Parish, State

Uintah, UT

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA**

**TYPE OF SUBMISSION**

☒

Notice of Intent

☐

Subsequent Report

☐

Final Abandonment Notice

**TYPE OF ACTION**

☐

Acidize

☐

Deepen

☐

Production (Start/Resume)

☐

Water Shut-Off

☐

Altering Casing

☐

Fracture Treat

☐

Reclamation

☐

Well Integrity

☐

Casing Repair

☐

New Construction

☐

Recomplete

☒

Other

☐

Change Plans

☐

Plug and Abandon

☐

Temporarily Abandon

☐

APD Expiration.

☐

Convert to Injection

☐

Plug Back

☐

Water Disposal

13 Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomple horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recomple in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

The State APD for this well expires May 17, 2006. Dominion hereby requesting a one year extension.

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date:

By:

14. I hereby certify that the foregoing is true and correct

Name (Printed Typed)

Carla Christian

Title

Sr. Regulatory Specialist

Signature

*Carla Christian*

Date

4/21/2006

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

RECEIVED

APR 24 2006

DIV. OF OIL, GAS & MINING

**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 43-047-36685  
**Well Name:** HCU 13-33F  
**Location:** Section 33-10S-20E, 1214' FSL & 356' FWL  
**Company Permit Issued to:** Dominion Exploration & Production, Inc.  
**Date Original Permit Issued:** 5/17/2005

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes ☐ No ☐

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes ☐ No ☒

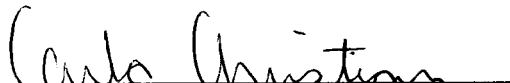
Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes ☐ No ☒

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes ☐ No ☒

Has the approved source of water for drilling changed? Yes ☐ No ☒

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes ☐ No ☒

Is bonding still in place, which covers this proposed well? Yes ☒ No ☐

  
Signature

4/21/2006

Date

**Title:** Sr. Regulatory Specialist

**Representing:** Dominion Exploration & Production, Inc.

RECEIVED  
APR 24 2006

DIV. OF OIL, GAS & MINING

## DIVISION OF OIL, GAS AND MINING

### ***SPUDDING INFORMATION***

Name of Company: DOMINION EXPL & PROD INC

Well Name: HCU 13-33F

Api No: 43-047-36685 Lease Type: FEDERAL

Section 33 Township 10S Range 20E County UINTAH

Drilling Contractor BILL JR'S RIG # 6

### **SPUDDED:**

Date 07/25/06

Time 11:30 PM

How DRY

***Drilling will Commence:*** \_\_\_\_\_

Reported by PAT WISENER

Telephone # (435) 828-1455

Date 07/26/2006 Signed CHD



STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 6

**ENTITY ACTION FORM**

Operator: Dominion Exploration & Production, Inc. Operator Account Number: N 1095  
Address: 14000 Quail Springs Parkway, Suite 600  
city Oklahoma City  
state Ok zip 73134 Phone Number: (405) 749-1300

**Well 1**

API Number	Well Name	QQ	Sec	Twp	Rng	County
43-047-36685	HCU 13-33F	SWSW	33	10S	20E	Uintah
Action Code	Current Entity Number	New Entity Number	Spud Date	Entity Assignment Effective Date		
<i>AB</i>	<i>99999</i>	<i>12829</i>	<i>7/25/2006</i>	<i>7/31/06</i>		
Comments: <i>mVRD</i> <span style="float: right; font-size: 2em;">CONFIDENTIAL</span>						

**Well 2**

API Number	Well Name	QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date	Entity Assignment Effective Date		
Comments:						

**Well 3**

API Number	Well Name	QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date	Entity Assignment Effective Date		
Comments:						

**ACTION CODES:**

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

Carla Christian

Name (Please Print)

*Carla Christian*

Signature

Sr. Regulatory Specialist

7/27/2006

Title

Date

RECEIVED

JUL 31 2006

DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires: November 30, 2000

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an**  
**abandoned well. Use Form 3160-3 (APD) for such proposals.**

**SUBMIT IN TRIPLICATE - Other Instructions on reverse side**

1. Type of Well

☐

Oil Well

☒

Gas Well

☐

Other

2. Name of Operator

Dominion Exploration & Production, Inc.

3a. Address

Suite 600

14000 Quail Springs Parkway, OKC, OK 73134

3b. Phone No. (include area code)

(405) 749-5263

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1214' FSL & 356' FWL, Sec. 33-10S-20E

5. Lease Serial No.

U-28203

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

Hill Creek Unit

8. Well Name and No.

HCU 13-33F

9. API Well No.

43-047-36685

10. Field and Pool, or Exploratory Area

Natural Buttes

11. County or Parish, State

Uintah, UT

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Spud Well
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13 Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Spud well 7/25/06. 7/25/06 ran 12 jts. 13 3/8", 48#, H-40, ST&C csg., set @ 522'. Cemented w/500 sks Class "G", 15.8 ppg, 1.15 yld. Good returns, 15 bbls cmt to surface. Witnessed by BLM rep Jamie Sparger.

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Carla Christian

Title Sr. Regulatory Specialist

Signature

*Carla Christian*

Date 8/2/2006

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

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RECEIVED

AUG 07 2006

DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires: November 30, 2000

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals.**

**SUBMIT IN TRIPLICATE - Other Instructions on reverse side**

1. Type of Well

☐ Oil Well

☒ Gas Well

☐ Other

2. Name of Operator

Dominion Exploration & Production, Inc.

3a. Address Suite 600  
14000 Quail Springs Parkway, OKC, OK 73134

3b. Phone No. (include area code)  
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1214' FSL & 356' FWL, Sec. 33-10S-20E

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Uintah, UT

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13 Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Dominion request permission to change the directional drilling plan slightly. The intermediate csg. will now be set at 3,000'. Attached is the new directional and drilling plan.

Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Carla Christian

Title Sr. Regulatory Specialist

Signature

*Carla Christian*

Date 8/21/2006

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

RECEIVED

AUG 25 2006

DIV. OF OIL, GAS & MINING



**Dominion™**

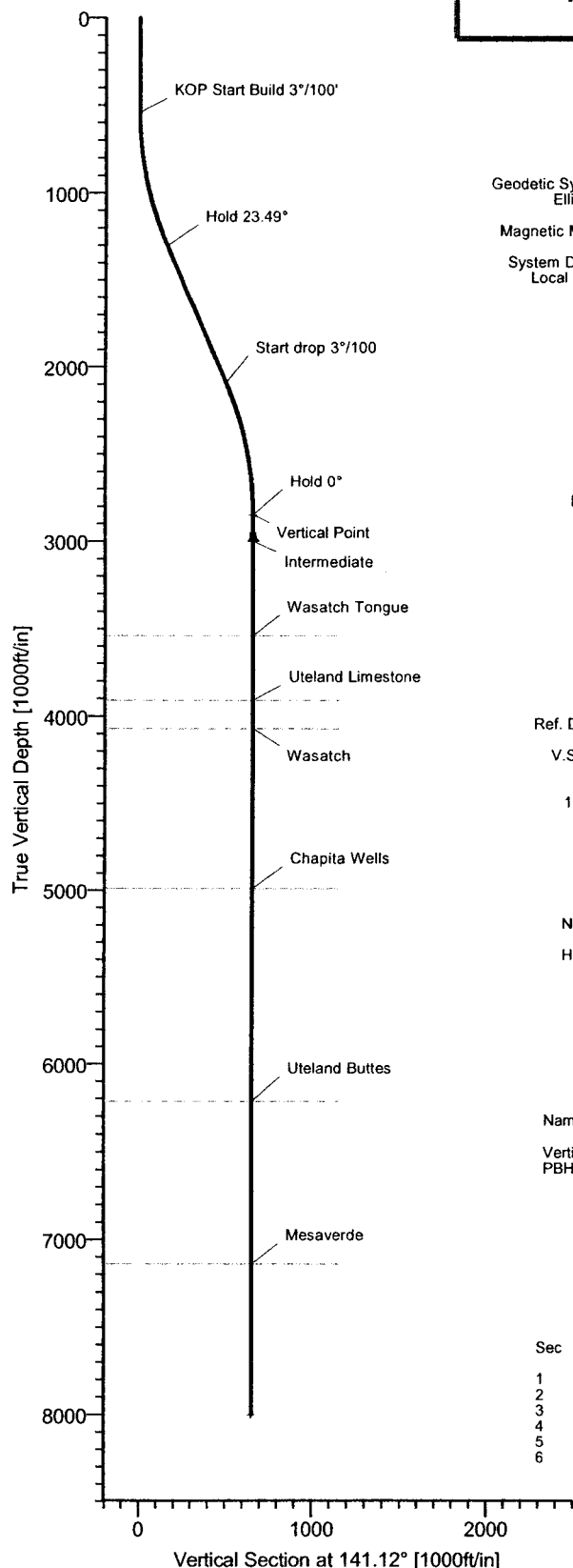
## Dominion Exploration & Production

Field: Uintah County, Utah  
Site: HCU # 13-33F  
Well: HCU 13-33F  
Wellpath: Original Hole  
Plan: Plan #1



Azimuths to True North  
Magnetic North: 11.75°

Magnetic Field  
Strength: 52790nT  
Dip Angle: 65.88°  
Date: 8/1/2006  
Model: igrf2005



### FIELD DETAILS

Uintah County, Utah  
Utah - Natural Buttes  
USA

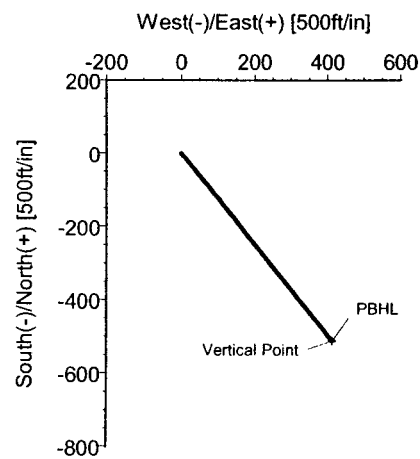
Geodetic System: US State Plane Coordinate System 1983  
Ellipsoid: GRS 1980  
Zone: Utah, Central Zone  
Magnetic Model: igrf2005  
System Datum: Mean Sea Level  
Local North: True North

### SITE DETAILS

HCU # 13-33F  
Sec. 33, 10S, 20E  
Site Centre Latitude: 39°53'59.030N  
Longitude: 109°40'43.220W  
Ground Level: 5322.00  
Positional Uncertainty: 0.00  
Convergence: 1.17

### WELLPATH DETAILS

Original Hole  
Rig: Patterson 12  
Ref. Datum: Est RKB 5340.00ft  
V. Section Angle: 141.12°  
Origin +N/-S: 0.00  
Origin +E/-W: 0.00  
Starting From TVD: 8000.00



### WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
HCU 13-33F	0.00	0.00	7137417.25	2151348.52	39°53'59.030N	109°40'43.220W	N/A

### TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
Vertical Point	2850.00	-512.86	413.49	Point
PBHL	8000.00	-512.86	413.49	Point

### FORMATION TOP DETAILS

No.	TVDPath	MDPath	Formation
1	3540.00	3654.66	Wasatch Tongue
2	3910.00	4024.66	Uteland Limestone
3	4070.00	4184.66	Wasatch
4	4990.00	5104.66	Chapita Wells
5	6215.00	6329.66	Uteland Buttes
6	7140.00	7254.66	Mesaverde

### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	141.12	0.00	0.00	0.00	0.00	0.00	0.00	
2	540.00	0.00	141.12	540.00	0.00	0.00	0.00	0.00	0.00	
3	1323.00	23.49	141.12	1301.25	-123.21	99.34	3.00	141.12	158.27	
4	2181.62	23.49	141.12	2088.72	-389.64	314.15	0.00	0.00	500.51	
5	2964.66	0.00	141.12	2850.00	-512.86	413.49	3.00	180.00	658.79	Vertical Point
6	8114.66	0.00	141.12	8000.00	-512.86	413.49	0.00	141.12	658.79	PBHL



# Ryan Energy Technologied

## Planning Report



**Company:** Dominion Exploration & Product  
**Field:** Uintah County, Utah  
**Site:** HCU # 13-33F  
**Well:** HCU 13-33F  
**Wellpath:** Original Hole

**Date:** 8/1/2006  
**Co-ordinate(NE) Reference:** Well: HCU 13-33F, True North  
**Vertical (TVD) Reference:** Est RKB 5340.0  
**Section (VS) Reference:** Well (0.00N,0.00E,141.12Azi)  
**Plan:** Plan #1

**Page:** 1

**Field:** Uintah County, Utah  
 Utah - Natural Buttes  
 USA

**Map System:** US State Plane Coordinate System 1983  
**Geo Datum:** GRS 1980  
**Sys Datum:** Mean Sea Level

**Map Zone:** Utah, Central Zone  
**Coordinate System:** Well Centre  
**Geomagnetic Model:** igrf2005

**Site:** HCU # 13-33F

Sec.33, 10S, 20E

<b>Site Position:</b>	<b>Northing:</b> 7137417.25 ft	<b>Latitude:</b> 39 53 59.030 N
<b>From:</b> Geographic	<b>Easting:</b> 2151348.52 ft	<b>Longitude:</b> 109 40 43.220 W
<b>Position Uncertainty:</b> 0.00 ft		<b>North Reference:</b> True
<b>Ground Level:</b> 5322.00 ft		<b>Grid Convergence:</b> 1.17 deg

**Well:** HCU 13-33F

**Slot Name:**

<b>Well Position:</b> +N/-S 0.00 ft	<b>Northing:</b> 7137417.25 ft	<b>Latitude:</b> 39 53 59.030 N
+E/-W 0.00 ft	<b>Easting:</b> 2151348.52 ft	<b>Longitude:</b> 109 40 43.220 W
<b>Position Uncertainty:</b> 0.00 ft		

**Wellpath:** Original Hole

<b>Current Datum:</b> Est RKB	<b>Height</b> 5340.00 ft	<b>Drilled From:</b> Surface
<b>Magnetic Data:</b> 8/1/2006		<b>Tie-on Depth:</b> 0.00 ft
<b>Field Strength:</b> 52790 nT		<b>Above System Datum:</b> Mean Sea Level
<b>Vertical Section:</b> Depth From (TVD)	+N/-S	<b>Declination:</b> 11.75 deg
ft	ft	<b>Mag Dip Angle:</b> 65.88 deg
		<b>+E/-W</b>
		<b>Direction</b>
		<b>deg</b>
8000.00	0.00	0.00 141.12

**Plan:** Plan #1

**Date Composed:** 6/15/2006  
**Version:** 1  
**Tied-to:** From Surface

**Principal:** Yes

### Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	141.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
540.00	0.00	141.12	540.00	0.00	0.00	0.00	0.00	0.00	0.00	
1323.00	23.49	141.12	1301.25	-123.21	99.34	3.00	3.00	0.00	141.12	
2181.62	23.49	141.12	2088.72	-389.64	314.15	0.00	0.00	0.00	0.00	
2964.66	0.00	141.12	2850.00	-512.86	413.49	3.00	-3.00	0.00	180.00	Vertical Point
8114.66	0.00	141.12	8000.00	-512.86	413.49	0.00	0.00	0.00	141.12	PBHL

### Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
540.00	0.00	141.12	540.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP Start Build 3°/100'
600.00	1.80	141.12	599.99	-0.73	0.59	0.94	3.00	3.00	0.00	
700.00	4.80	141.12	699.81	-5.21	4.20	6.70	3.00	3.00	0.00	
800.00	7.80	141.12	799.20	-13.76	11.09	17.67	3.00	3.00	0.00	
900.00	10.80	141.12	897.87	-26.34	21.23	33.83	3.00	3.00	0.00	
1000.00	13.80	141.12	995.57	-42.92	34.60	55.13	3.00	3.00	0.00	
1100.00	16.80	141.12	1092.01	-63.46	51.16	81.51	3.00	3.00	0.00	
1200.00	19.80	141.12	1186.94	-87.90	70.87	112.91	3.00	3.00	0.00	
1300.00	22.80	141.12	1280.10	-116.18	93.67	149.23	3.00	3.00	0.00	
1323.00	23.49	141.12	1301.25	-123.21	99.34	158.27	3.00	3.00	0.00	Hold 23.49°
1400.00	23.49	141.12	1371.87	-147.11	118.60	188.96	0.00	0.00	0.00	
1500.00	23.49	141.12	1463.58	-178.14	143.62	228.82	0.00	0.00	0.00	
1600.00	23.49	141.12	1555.29	-209.17	168.64	268.68	0.00	0.00	0.00	
1700.00	23.49	141.12	1647.01	-240.20	193.66	308.54	0.00	0.00	0.00	
1800.00	23.49	141.12	1738.72	-271.23	218.67	348.40	0.00	0.00	0.00	



# Ryan Energy Technologies Planning Report



Company: Dominion Exploration & Product  
Field: Uintah County, Utah  
Site: HCU # 13-33F  
Well: HCU 13-33F  
Wellpath: Original Hole

Date: 8/1/2006 Time: 09:37:42 Page: 2  
Co-ordinate(NE) Reference: Well: HCU 13-33F, True North  
Vertical (TVD) Reference: Est RKB 5340.0  
Section (VS) Reference: Well (0.00N,0.00E,141.12Azi)  
Plan: Plan #1

## Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
1900.00	23.49	141.12	1830.43	-302.26	243.69	388.26	0.00	0.00	0.00	
2000.00	23.49	141.12	1922.15	-333.28	268.71	428.12	0.00	0.00	0.00	
2100.00	23.49	141.12	2013.86	-364.31	293.73	467.97	0.00	0.00	0.00	
2181.62	23.49	141.12	2088.72	-389.64	314.15	500.51	0.00	0.00	0.00	Start drop 3°/100
2200.00	22.94	141.12	2105.61	-395.28	318.69	507.75	3.00	-3.00	0.00	
2300.00	19.94	141.12	2198.68	-423.73	341.63	544.30	3.00	-3.00	0.00	
2400.00	16.94	141.12	2293.53	-448.35	361.48	575.92	3.00	-3.00	0.00	
2500.00	13.94	141.12	2389.91	-469.07	378.19	602.54	3.00	-3.00	0.00	
2600.00	10.94	141.12	2487.55	-485.84	391.71	624.08	3.00	-3.00	0.00	
2700.00	7.94	141.12	2586.19	-498.61	402.00	640.48	3.00	-3.00	0.00	
2800.00	4.94	141.12	2685.55	-507.34	409.04	651.69	3.00	-3.00	0.00	
2900.00	1.94	141.12	2785.35	-512.01	412.80	657.69	3.00	-3.00	0.00	
2964.66	0.00	141.12	2850.00	-512.86	413.49	658.79	3.00	-3.00	0.00	Vertical Point
3000.00	0.00	141.12	2885.34	-512.86	413.49	658.79	0.00	0.00	0.00	
3100.00	0.00	141.12	2985.34	-512.86	413.49	658.79	0.00	0.00	0.00	
3114.66	0.00	141.12	3000.00	-512.86	413.49	658.79	0.00	0.00	0.00	Intermediate
3200.00	0.00	141.12	3085.34	-512.86	413.49	658.79	0.00	0.00	0.00	
3300.00	0.00	141.12	3185.34	-512.86	413.49	658.79	0.00	0.00	0.00	
3400.00	0.00	141.12	3285.34	-512.86	413.49	658.79	0.00	0.00	0.00	
3500.00	0.00	141.12	3385.34	-512.86	413.49	658.79	0.00	0.00	0.00	
3600.00	0.00	141.12	3485.34	-512.86	413.49	658.79	0.00	0.00	0.00	
3654.66	0.00	141.12	3540.00	-512.86	413.49	658.79	0.00	0.00	0.00	Wasatch Tongue
3700.00	0.00	141.12	3585.34	-512.86	413.49	658.79	0.00	0.00	0.00	
3800.00	0.00	141.12	3685.34	-512.86	413.49	658.79	0.00	0.00	0.00	
3900.00	0.00	141.12	3785.34	-512.86	413.49	658.79	0.00	0.00	0.00	
4000.00	0.00	141.12	3885.34	-512.86	413.49	658.79	0.00	0.00	0.00	
4024.66	0.00	141.12	3910.00	-512.86	413.49	658.79	0.00	0.00	0.00	Uteland Limestone
4100.00	0.00	141.12	3985.34	-512.86	413.49	658.79	0.00	0.00	0.00	
4184.66	0.00	141.12	4070.00	-512.86	413.49	658.79	0.00	0.00	0.00	Wasatch
4200.00	0.00	141.12	4085.34	-512.86	413.49	658.79	0.00	0.00	0.00	
4300.00	0.00	141.12	4185.34	-512.86	413.49	658.79	0.00	0.00	0.00	
4400.00	0.00	141.12	4285.34	-512.86	413.49	658.79	0.00	0.00	0.00	
4500.00	0.00	141.12	4385.34	-512.86	413.49	658.79	0.00	0.00	0.00	
4600.00	0.00	141.12	4485.34	-512.86	413.49	658.79	0.00	0.00	0.00	
4700.00	0.00	141.12	4585.34	-512.86	413.49	658.79	0.00	0.00	0.00	
4800.00	0.00	141.12	4685.34	-512.86	413.49	658.79	0.00	0.00	0.00	
4900.00	0.00	141.12	4785.34	-512.86	413.49	658.79	0.00	0.00	0.00	
5000.00	0.00	141.12	4885.34	-512.86	413.49	658.79	0.00	0.00	0.00	
5100.00	0.00	141.12	4985.34	-512.86	413.49	658.79	0.00	0.00	0.00	
5104.66	0.00	141.12	4990.00	-512.86	413.49	658.79	0.00	0.00	0.00	Chapita Wells
5200.00	0.00	141.12	5085.34	-512.86	413.49	658.79	0.00	0.00	0.00	
5300.00	0.00	141.12	5185.34	-512.86	413.49	658.79	0.00	0.00	0.00	
5400.00	0.00	141.12	5285.34	-512.86	413.49	658.79	0.00	0.00	0.00	
5500.00	0.00	141.12	5385.34	-512.86	413.49	658.79	0.00	0.00	0.00	
5600.00	0.00	141.12	5485.34	-512.86	413.49	658.79	0.00	0.00	0.00	
5700.00	0.00	141.12	5585.34	-512.86	413.49	658.79	0.00	0.00	0.00	
5800.00	0.00	141.12	5685.34	-512.86	413.49	658.79	0.00	0.00	0.00	
5900.00	0.00	141.12	5785.34	-512.86	413.49	658.79	0.00	0.00	0.00	
6000.00	0.00	141.12	5885.34	-512.86	413.49	658.79	0.00	0.00	0.00	
6100.00	0.00	141.12	5985.34	-512.86	413.49	658.79	0.00	0.00	0.00	
6200.00	0.00	141.12	6085.34	-512.86	413.49	658.79	0.00	0.00	0.00	
6300.00	0.00	141.12	6185.34	-512.86	413.49	658.79	0.00	0.00	0.00	
6329.66	0.00	141.12	6215.00	-512.86	413.49	658.79	0.00	0.00	0.00	Uteland Buttes
6400.00	0.00	141.12	6285.34	-512.86	413.49	658.79	0.00	0.00	0.00	



# Ryan Energy Technologies

## Planning Report



Company: Dominion Exploration & Product  
Field: Uintah County, Utah  
Site: HCU # 13-33F  
Well: HCU 13-33F  
Wellpath: Original Hole

Date: 8/1/2006 Time: 09:37:42 Page: 3  
Co-ordinate(NE) Reference: Well: HCU 13-33F, True North  
Vertical (TVD) Reference: Est RKB 5340.0  
Section (VS) Reference: Well (0.00N,0.00E,141.12Azi)  
Plan: Plan #1

### Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
6500.00	0.00	141.12	6385.34	-512.86	413.49	658.79	0.00	0.00	0.00	
6600.00	0.00	141.12	6485.34	-512.86	413.49	658.79	0.00	0.00	0.00	
6700.00	0.00	141.12	6585.34	-512.86	413.49	658.79	0.00	0.00	0.00	
6800.00	0.00	141.12	6685.34	-512.86	413.49	658.79	0.00	0.00	0.00	
6900.00	0.00	141.12	6785.34	-512.86	413.49	658.79	0.00	0.00	0.00	
7000.00	0.00	141.12	6885.34	-512.86	413.49	658.79	0.00	0.00	0.00	
7100.00	0.00	141.12	6985.34	-512.86	413.49	658.79	0.00	0.00	0.00	
7200.00	0.00	141.12	7085.34	-512.86	413.49	658.79	0.00	0.00	0.00	
7254.66	0.00	141.12	7140.00	-512.86	413.49	658.79	0.00	0.00	0.00	Mesaverde
7300.00	0.00	141.12	7185.34	-512.86	413.49	658.79	0.00	0.00	0.00	
7400.00	0.00	141.12	7285.34	-512.86	413.49	658.79	0.00	0.00	0.00	
7500.00	0.00	141.12	7385.34	-512.86	413.49	658.79	0.00	0.00	0.00	
7600.00	0.00	141.12	7485.34	-512.86	413.49	658.79	0.00	0.00	0.00	
7700.00	0.00	141.12	7585.34	-512.86	413.49	658.79	0.00	0.00	0.00	
7800.00	0.00	141.12	7685.34	-512.86	413.49	658.79	0.00	0.00	0.00	
7900.00	0.00	141.12	7785.34	-512.86	413.49	658.79	0.00	0.00	0.00	
8000.00	0.00	141.12	7885.34	-512.86	413.49	658.79	0.00	0.00	0.00	
8100.00	0.00	141.12	7985.34	-512.86	413.49	658.79	0.00	0.00	0.00	
8114.66	0.00	141.12	8000.00	-512.86	413.49	658.79	0.00	0.00	0.00	PBHL

### Targets

Name	Description Dip. Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	Latitude Deg Min Sec	Longitude Deg Min Sec
Vertical Point		2850.00	-512.86	413.49	7136912.912151772.37		39 53 53.961 N	109 40 37.914 W
-Plan hit target								
PBHL		8000.00	-512.86	413.49	7136912.912151772.37		39 53 53.961 N	109 40 37.914 W
-Plan hit target								

### Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
3114.66	3000.00	9.625	9.625	Intermediate

### Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
3654.66	3540.00	Wasatch Tongue		0.00	0.00
4024.66	3910.00	Uteland Limestone		0.00	0.00
4184.66	4070.00	Wasatch		0.00	0.00
5104.66	4990.00	Chapita Wells		0.00	0.00
6329.66	6215.00	Uteland Buttes		0.00	0.00
7254.66	7140.00	Mesaverde		0.00	0.00

### Annotation

MD ft	TVD ft	
540.00	540.00	KOP Start Build 3°/100'
1323.00	1301.25	Hold 23.49°
2181.62	2088.72	Start drop 3°/100
2964.66	2850.00	Hold 0°

## DRILLING PLAN

### APPROVAL OF OPERATIONS

#### Attachment for Permit to Drill

**Name of Operator:** Dominion Exploration & Production  
**Address:** 14000 Quail Springs Parkway, Suite 600  
Oklahoma City, OK 73134  
**Well Location:** HCU 13-33F  
SHL: 1214' FSL & 356' FWL Section 33-10S-20E  
BHL: 700' FSL & 800' FWL Section 33-10S-20E  
Uintah County, UT

1. GEOLOGIC SURFACE FORMATION Uintah

2. ESTIMATED DEPTHS OF IMPORTANT GEOLOGIC MARKERS

<u>Formation</u>	<u>Depth</u>
Wasatch Tongue	3,540'
Uteland Limestone	3,910'
Wasatch	4,070'
Chapita Wells	4,990'
Uteland Buttes	6,215'
Mesaverde	7,140'

3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS

<u>Formation</u>	<u>Depth</u>	<u>Type</u>
Wasatch Tongue	3,540'	Oil
Uteland Limestone	3,910'	Oil
Wasatch	4,070'	Gas
Chapita Wells	4,990'	Gas
Uteland Buttes	6,215'	Gas
Mesaverde	7,140	Gas

4. PROPOSED CASING PROGRAM

All casing used to drill this well will be new casing.

<u>Type</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Conn.</u>	<u>Top</u>	<u>Bottom</u>	<u>Hole</u>
Surface	13-3/8"	48.0 ppf	H-40	STC	0'	500'	17-1/2"
Intermediate	9-5/8"	36.0 ppf	J-55	LTC	0'	3,000'	12-1/4"
Production	5-1/2"	17.0 ppf	MAV-80	LTC	0'	8,000'	7-7/8"

5. OPERATOR'S MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL

Surface hole: No BOPE will be utilized.

Intermediate hole: To be drilled using a diverter stack with rotating head to divert flow from rig floor.

Production hole: Prior to drilling out the intermediate casing shoe, 3,000 psi or greater BOP equipment will be installed. The pipe rams will be operated at least once per day from intermediate casing to total depth. The blind rams will be tested once per day from intermediate casing to total depth if operations permit.



## DRILLING PLAN

### APPROVAL OF OPERATIONS

A diagram of the planned BOP equipment for normal drilling operations in this area is attached. As denoted there will be two valves and one check valve on the kill line, two valves on the choke line, and two adjustable chokes on the manifold system. The BOP "stack" will consist of two BOP rams (1 pipe, 1 blind) and one annular type preventer, all rated to a minimum of 3,000 psi working pressure.

The BOP equipment will be pressure tested prior to drilling below the intermediate casing shoe. All test pressures will be maintained for fifteen (15) minutes without any significant pressure decrease. Clear water will be circulated into the BOP stack and lines prior to pressure testing. The following test pressures will be used as a minimum for various equipment items.

1.	Annular BOP	1,500 psi
2.	Ram type BOP	3,000 psi
3.	Kill line valves	3,000 psi
4.	Choke line valves and choke manifold valves	3,000 psi
5.	Chokes	3,000 psi
6.	Casing, casinghead & weld	1,500 psi
7.	Upper kelly cock and safety valve	3,000 psi
8.	Dart valve	3,000 psi

#### 6. MUD SYSTEMS

- An air or an air/mist system may be used to drill to drill the surface hole until water influx becomes too great.
- KCL mud system will be used to drill well.

<u>Depths</u>	<u>Mud Weight (ppg)</u>	<u>Mud System</u>
0' – 500'	8.4	Air foam mist, no pressure control
500' – 3,000'	8.6	Fresh water, rotating head and diverter
3,000' – 8,000'	8.6	Fresh water/2% KCL/KCL mud system

#### 7. BLOOIE LINE

- An automatic igniter will not be installed on blooie line. The blooie will have a constant ignition source.
- A "target tee" connection will be installed on blooie line for 90° change of directions for abrasion resistance.
- "Target tee" connections will be a minimum of 50' from wellhead.
- The blooie line discharge will be a minimum of 100' from the wellhead.

#### 8. AUXILIARY EQUIPMENT TO BE USED

- a. Kelly cock.
- b. Full opening valve with drill pipe connection will be kept on floor. Valve will be used when the kelly is not in string.

#### 9. TESTING, LOGGING, AND CORING PROGRAMS TO BE FOLLOWED

- A drillstem test in the Wasatch Tongue is possible.
- One electric line wire-log will be run from total depth to intermediate casing.
- The gamma ray will be left on to record from total depth to intermediate casing.
- Other log curves (resistivities, porosity, and caliper) will record from total depth to intermediate casing.
- A dipmeter, percussion cores, or rotary cores may be run over selected intervals.

#### 10. ANTICIPATED ABNORMAL PRESSURES OR TEMPERATURES EXPECTED

- Expected BHP 1,500–2,000 psi (lower than normal pressure gradient).
- No abnormal temperature or pressures are anticipated.
- The formations to be penetrated do not contain known H<sub>2</sub>S gas.

#### 11. WATER SUPPLY

- No water pipelines will be laid for this well.
- No water well will be drilled for this well.
- Drilling water for this will be hauled on the road(s) shown in Attachment No. 3.
- Water will be hauled from: Water Permit # 43-10447 Section 9, Township 8 South, Range 20 East

## DRILLING PLAN

### APPROVAL OF OPERATIONS

#### 12. CEMENT SYSTEMS

##### a. Surface Cement:

Drill 17-1/2" hole to 500' and cement 13-3/8" to surface with 450 sks class "C" cement with 2% CaCl<sub>2</sub> and 1/4 #/sk. Poly-E-Flakes (volume includes 40% excess). Top out if necessary with Top Out cement listed below.

##### b. Intermediate Casing Cement:

- Drill 12-1/4" hole to 3,000'±, run and cement 9-5/8" to surface.
- Pump 20 bbls lightly weighted water spacer followed by 5 bbls fresh water. Displace with any available water.
- Casing to be run with: a) guide shoe b) insert float c) three (3) centralizers, one on each of first 3 joints d) stop ring for plug two joints off bottom e) bottom three joints thread locked f) pump job with bottom plug only.
- Cement to surface not required due to surface casing set deeper than normal.

Type	Sacks	Interval	Density	Yield	Hole Volume	Cement Volume	Excess
Lead	347	0'-2,500'	11.0 ppg	4.14 CFS	821 CF	1,437 CF	75%
Tail	254	2,500'-3,000'	15.6 ppg	1.20 CFS	174 CF	305 CF	75%

Lead Mix: Halliburton Prem Plus V blend. Blend includes Class "C" cement, gel, salt, gilsonite, EX-1 and HR-7.  
Slurry yield: 3.82 cf/sack      Slurry weight: 11.00 #/gal.  
Water requirement: 22.95 gal/sack  
Compressives @ 130°F: 157 psi after 24 hours

Tail Mix: Class "G" Cement, 1/4 lb/sk Cellophane Flakes + 2% bwoc Calcium Chloride + 44.3% fresh water.  
Pump Time: 1 hr. 5 min. @ 90 °F.  
Compressives @ 95 °F: 24 Hour is 4,700 psi

##### c. Production Casing Cement:

- Drill 7-7/8" hole to 8,000'±, run and cement 5 1/2".
- Cement interface is at 3,700', which is typically 500'-1,000' above shallowest pay.
- Pump 20 bbl Mud Clean II unweighted spacer, followed by 20 Bbls fresh H2O spacer.
- Displace with 3% KCL.

Type	Sacks	Interval	Density	Yield	Hole Volume	Cement Volume	Excess
Lead	90	3,700'-4,500'	11.5 ppg	3.12 CFS	139 CF	277 CF	100%
Tail	600	4,500'-8,000'	13.0 ppg	1.75 CFS	525 CF	1050 CF	100%

Note: Caliper will be run to determine exact cement volume.

Lead Mix: Halliburton Prem Plus V blend. Blend includes Class "C" cement, gel, salt, gilsonite, EX-1 and HR-7.  
Slurry yield: 3.12 cf/sack      Slurry weight: 11.60 #/gal.  
Water requirement: 17.71 gal/sack  
Compressives @ 130°F: 157 psi after 24 hours

Tail Mix: Halliburton HLC blend (Prem Plus V/JB flyash). Blend includes Class "G" cement, KCl, EX-1, Halad 322, & HR-5.  
Slurry yield: 1.75 cf/sack      Slurry weight: 13.00 #/gal.  
Water requirement: 9.09 gal/sack  
Compressives @ 165°F: 905 psi after 24 hours

#### 13. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS

Starting Date: July 1, 2006  
Duration: 14 Days

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires: November 30, 2000

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an**  
**abandoned well. Use Form 3160-3 (APD) for such proposals.**

**SUBMIT IN TRIPLICATE - Other Instructions on reverse side**

1. Type of Well

☐

Oil Well

☒

Gas Well

☐

Other

2. Name of Operator

Dominion Exploration & Production, Inc.

3a. Address

14000 Quail Springs Pkwy, Ste 600, OKC, OK 73134

3b. Phone No. (include area code)

(405) 749-5237

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SHL: 1214' FSL & 356' FWL, SW SW, Sec. 33-10S-20E

BHL: 700' FSL & 800' FWL, SW SW, Sec. 33-10S-20E

5. Lease Serial No.

U-28203

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

Hill Creek Unit

8. Well Name and No.

HCU 13-33F

9. API Well No.

43-047-36685

10. Field and Pool, or Exploratory Area

Natural Buttes

11. County or Parish, State

Uintah, UT

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13 Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Dominion requests permission to change the directional plan slightly. The intermediate casing will now be set at 3077'. Attached is the new directional and drilling plan.

**Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY**

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Barbara Lester

Title Regulatory Specialist

Signature



Date 2/26/2007

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**RECEIVED  
FEB 27 2007**

**DIV. OF OIL, GAS & MINING**

## DIRECTIONAL DRILLING PLAN

### APPROVAL OF OPERATIONS

#### Attachment for Permit to Drill

**Name of Operator:** Dominion Exploration & Production  
**Address:** 14000 Quail Springs Parkway, Suite 600  
Oklahoma City, OK 73134  
**Well Location:** **HCU 13-33F**  
SHL: 1214' FSL & 356' FWL, Sec. 33-10S-20E  
BHL: 700' FNL & 800' FEL, Sec. 33-10S-20E  
Uintah County, UT

1. GEOLOGIC SURFACE FORMATION Uintah

2. ESTIMATED DEPTHS OF IMPORTANT GEOLOGIC MARKERS

<u>Formation</u>	<u>Depth (MD)</u>
Wasatch Tongue	3,662'
Uteland Limestone	4,032'
Wasatch	4,192'
Chapita Wells	5,112'
Uteland Buttes	6,337'
Mesaverde	7,262'

3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS

<u>Formation</u>	<u>Depth (MD)</u>	<u>Type</u>
Wasatch Tongue	3,662'	Oil
Uteland Limestone	4,302'	Oil
Wasatch	4,192'	Gas
Chapita Wells	5,112'	Gas
Uteland Buttes	6,337'	Gas
Mesaverde	7,262'	Gas

4. PROPOSED CASING PROGRAM

All casing used to drill this well will be new casing.

<u>Type</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Conn.</u>	<u>Top</u>	<u>Bottom (MD)</u>	<u>Hole</u>
Surface	13-3/8"	48.0 ppf	H-40	STC	0'	500'	17-1/2"
Intermediate	9-5/8"	36.0 ppf	J-55	STC	0'	3,077'	12-1/4"
Production	5-1/2"	17.0 ppf	MAV-80	LTC	0'	8,122'	7-7/8"

5. OPERATOR'S MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL

Surface hole: No BOPE will be utilized.

Intermediate hole: To be drilled using a diverter stack with rotating head to divert flow from rig floor.

Production hole: Prior to drilling out the intermediate casing shoe, 3,000 psi or greater BOP equipment will be installed. The pipe rams will be operated at least once per day from surface to total depth. The blind rams will be tested once per day from surface to total depth if operations permit.

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FEB 27 2007

DIV. OF OIL, GAS & MINING

## DRILLING PLAN

### APPROVAL OF OPERATIONS

A diagram of the planned BOP equipment for normal drilling operations in this area is attached. As denoted there will be two valves and one check valve on the kill line, two valves on the choke line, and two adjustable chokes on the manifold system. The BOP "stack" will consist of two BOP rams (1 pipe, 1 blind) and one annular type preventer, all rated to a minimum of 3,000 psi working pressure.

The BOP equipment will be pressure tested prior to drilling out surface casing shoe and anytime a new casing string is set.. All test pressures will be maintained for fifteen (15) minutes without any significant pressure decrease. Clear water will be circulated into the BOP stack and lines prior to pressure testing. The following test pressures will be used as a minimum for various equipment items.

1.	Annular BOP	1,500 psi
2.	Ram type BOP	3,000 psi
3.	Kill line valves	3,000 psi
4.	Choke line valves and choke manifold valves	3,000 psi
5.	Chokes	3,000 psi
6.	Casing, casinghead & weld	1,500 psi
7.	Upper kelly cock and safety valve	3,000 psi
8.	Dart valve	3,000 psi

#### 6. MUD SYSTEMS

- An air or an air/mist system may be used to drill to drill the surface hole until water influx becomes too great.
- KCL mud system will be used to drill well.
- The mud system will be monitored manually/visually.

<u>Depths (MD)</u>	<u>Mud Weight (ppg)</u>	<u>Mud System</u>
0' – 500'	8.4	Air foam mist, no pressure control
500' – 3,077'	8.6	Fresh water, rotating head and diverter
3,077' – 8,122'	8.6	Fresh water/2% KCL/KCL mud system

#### 7. BLOOIE LINE

- An automatic igniter will not be installed on blooie line. The blooie will have a constant ignition source.
- A "target tee" connection will be installed on blooie line for 90° change of directions for abrasion resistance.
- "Target tee" connections will be a minimum of 50' from wellhead.
- The blooie line discharge will be a minimum of 80' from the wellhead.

#### 8. AUXILIARY EQUIPMENT TO BE USED

- a. Kelly cock.
- b. Full opening valve with drill pipe connection will be kept on floor. Valve will be used when the kelly is not in string.

#### 9. TESTING, LOGGING, AND CORING PROGRAMS TO BE FOLLOWED

- A drillstem test in the Wasatch Tongue is possible.
- One electric line wire-log will be run from total depth to intermediate casing.
- The gamma ray will be left on to record from total depth to intermediate casing.
- Other log curves (resistivities, porosity, and caliper) will record from total depth to intermediate casing.
- A dipmeter, percussion cores, or rotary cores may be run over selected intervals.

#### 10. ANTICIPATED ABNORMAL PRESSURES OR TEMPERATURES EXPECTED

- Expected BHP 1,500–2,000 psi (lower than normal pressure gradient).
- No abnormal temperature or pressures are anticipated.
- The formations to be penetrated do not contain known H<sub>2</sub>S gas.

#### 11. WATER SUPPLY

- No water pipelines will be laid for this well.
- No water well will be drilled for this well.
- Drilling water for this will be hauled on the road(s) shown in Attachment No. 3.
- Water will be hauled from: Water Permit # 43-10447 Section 9, Township 8 South, Range 20 East

## DRILLING PLAN

### APPROVAL OF OPERATIONS

#### 12. CEMENT SYSTEMS

##### a. Surface Cement:

- Drill 17-1/2" hole to 500' and cement 13-3/8" to surface with 450 sks class "C" cement with 2% CaCl<sub>2</sub> and 1/4 #/sk. Polyflake (volume includes 70% excess). Top out as necessary. Casing to be centralized with a total of 5 centralizers.

##### b. Intermediate Casing Cement:

- Drill 12-1/4" hole to 3,077' (MD)  $\pm$ , run and cement 9-5/8" to surface.
- Pump 20 bbls lightly weighted water spacer followed by 5 bbls fresh water. Displace with any available water.
- Casing to be run with: a) guide shoe b) insert float c) three (3) centralizers, one on each of first 3 joints d) stop ring for plug one joint off bottom e) bottom three joints thread locked f) pump job with bottom plug only. Casing to be centralized with a total of 15 centralizers.
- Cement to surface not required due to surface casing set deeper than normal.

Type	Sacks	Interval (MD)	Density	Yield	Hole Volume	Cement Volume
Lead	357	0'-2,577'	10.5 ppg	4.14 CFS	845 CF	1,479 CF
Tail	254	2,577'-3,077'	15.6 ppg	1.2 CFS	174 CF	304 CF

Intermediate design volumes based on 75% excess of gauge hole.

Lead Mix: Halliburton Prem Plus V blend. Blend includes Class "C" cement, gel, salt, gilsonite, EX-1 and HR-7.  
Slurry yield: 4.14 cf/sack      Slurry weight: 10.5 #/gal.  
Water requirement: 26.07 gal/sack  
Compressives @ 110°F: 72 psi after 24 hours

Tail Mix: Class "G" Cement, 1/4 lb/sk Cellophane Flakes + 2% bwoc Calcium Chloride + 46.5% fresh water.  
Slurry yield: 1.20 cf/sack      Slurry weight: 15.6 #/gal.  
Pump Time: 1 hr. 5 min. @ 110 °F.  
Compressives @ 110 °F: 2,500 psi after 24 hours

##### c. Production Casing Cement:

- Drill 7-7/8" hole to 8,122' (MD)  $\pm$ , run and cement 5 1/2".
- Pump 20 bbl Mud Clean II unweighted spacer, followed by 20 Bbls fresh H2O spacer.
- Displace with 2% KCL.
- Production casing to be centralized with 30 centralizers.

Type	Sacks	Interval (MD)	Density	Yield	Hole Volume	Cement Volume
Lead	90	3,392'-4,192'	11.5 ppg	3.12 CFS	139 CF	277 CF
Tail	780	4,192'-8,122'	13.0 ppg	1.75 CFS	681 CF	1362 CF

Production design volumes based on 35% excess of gauge hole. Actual volumes will be calculated from caliper log to bring lead cement to 800' above top of Wasatch + 15% excess, and tail cement to top of Wasatch +15%.

Lead Mix: Halliburton Prem Plus V blend. Blend includes Class "C" cement, gel, salt, gilsonite, EX-1 and HR-7.  
Slurry yield: 3.12 cf/sack      Slurry weight: 11.60 #/gal.  
Water requirement: 17.71 gal/sack  
Compressives @ 130°F: 157 psi after 24 hours

Tail Mix: Halliburton HLC blend (Prem Plus V/JB flyash). Blend includes Class "G" cement, KCl, EX-1, Halad 322, & HR-5.  
Slurry yield: 1.75 cf/sack      Slurry weight: 13.00 #/gal.  
Water requirement: 9.09 gal/sack  
Compressives @ 165°F: 905 psi after 24 hours

#### 13. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS

Starting Date: June 26, 2007  
Duration: 14 Days



**Dominion™**

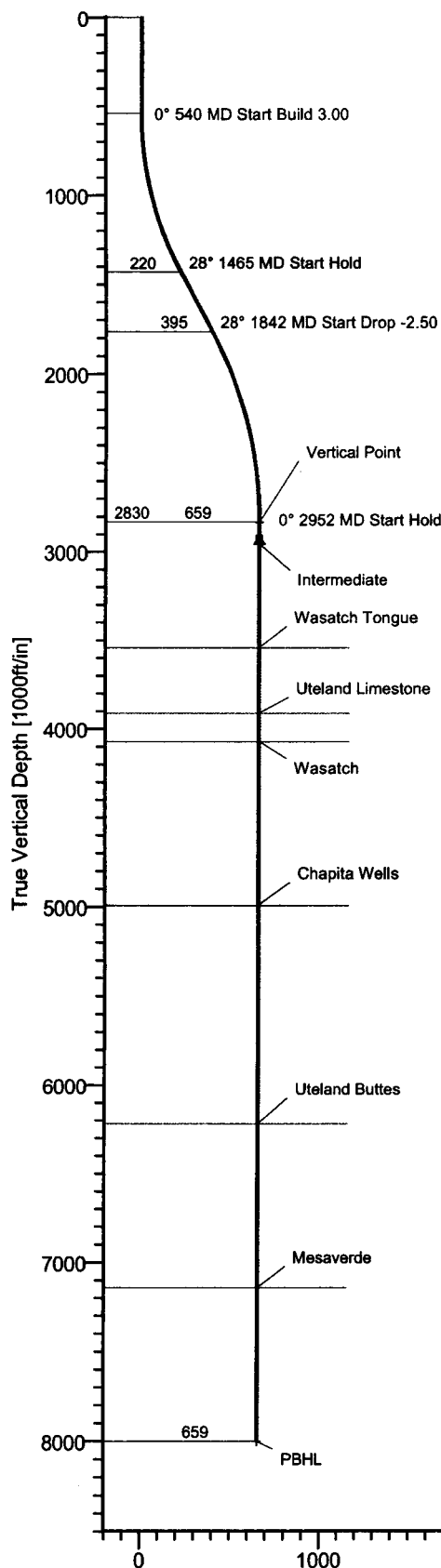
## Dominion Exploration & Production

Field: Uintah County, Utah  
Site: HCU # 13-33F  
Well: HCU 13-33F  
Wellpath: Original Hole  
Plan: Plan #2



Azimuths to True North  
Magnetic North: 11.68°

Magnetic Field  
Strength: 52739nT  
Dip Angle: 65.87°  
Date: 2/12/2007  
Model: Igrf2005



Vertical Section at 141.12° [1000ft/in]

### FIELD DETAILS

Uintah County, Utah  
Utah - Natural Buttes  
USA

Geodetic System: US State Plane Coordinate System 1983  
Ellipsoid: GRS 1980  
Zone: Utah, Central Zone  
Magnetic Model: Igrf2005

System Datum: Mean Sea Level  
Local North: True North

### SITE DETAILS

HCU # 13-33F  
Sec 33, T10S, R20E  
Uintah Co, Utah

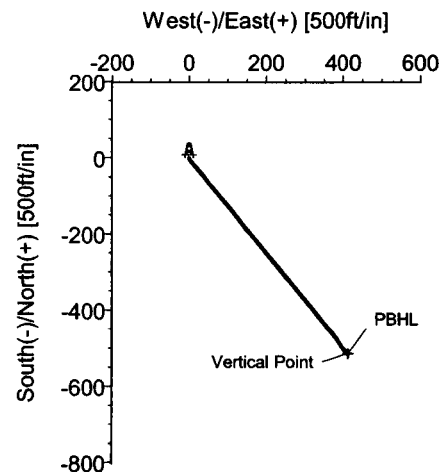
Site Centre Latitude: 39°53'59.030N  
Longitude: 109°40'43.220W

Ground Level: 5322.00  
Positional Uncertainty: 0.00  
Convergence: 1.17

### WELLPATH DETAILS

Original Hole

Rig:	Ciclon 5	Est RKB	5340.00ft
Ref. Datum:			
V. Section Angle	Origin +N/-S	Origin +E/-W	Starting From TVD
141.12°	0.00	0.00	0.00



### WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
HCU 13-33F	0.00	0.00	7137417.25	2151348.52	39°53'59.030N	109°40'43.220W	N/A

### TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
Vertical Point	2830.00	-512.86	413.49	Point
PBHL	8000.00	-512.86	413.49	Point

### FORMATION TOP DETAILS

No.	TVDPath	MDPath	Formation
1	3540.00	3661.99	Wasatch Tongue
2	3910.00	4031.99	Uteland Limestone
3	4070.00	4191.99	Wasatch
4	4990.00	5111.99	Chapita Wells
5	6215.00	6336.99	Uteland Buttes
6	7140.00	7261.99	Mesaverde

### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	141.12	0.00	0.00	0.00	0.00	0.00	0.00	
2	540.00	0.00	141.12	540.00	0.00	0.00	0.00	141.12	0.00	
3	1465.03	27.75	141.12	1429.28	-171.01	137.88	3.00	141.12	219.67	
4	1841.96	27.75	141.12	1762.86	-307.64	248.04	0.00	0.00	395.18	
5	2951.99	0.00	141.12	2830.00	-512.86	413.49	2.50	180.00	658.79	Vertical Point
6	8121.99	0.00	141.12	8000.00	-512.86	413.49	0.00	141.12	658.79	PBHL

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FEB 27 2007

Ryan Energy Technologies  
19510 Oil Center Blvd  
Houston, TX 77073  
Ph: 281-443-1414  
Fx: 281-443-1676



**Ryan**

The leader in  
UNDERGROUND INVESTIGATION

DIV. OF OIL, GAS & MINING

Plan: Plan #2 (HCU 13-33F/Original Hole)  
Created By: Alexis Gonzalez Date: 2/12/2007  
Checked: \_\_\_\_\_ Date: \_\_\_\_\_  
Reviewed: \_\_\_\_\_ Date: \_\_\_\_\_  
Approved: \_\_\_\_\_ Date: \_\_\_\_\_



# Ryan Energy Technologies

## Planning Report



Company: Dominion Exploration & Product  
Field: Uintah County, Utah  
Site: HCU # 13-33F  
Well: HCU 13-33F  
Wellpath: Original Hole

Date: 2/12/2007  
Co-ordinate(NE) Reference: Well: HCU 13-33F, True North  
Vertical (TVD) Reference: Est RKB 5340.0  
Section (VS) Reference: Well (0.00N,0.00E,141.12Azi)  
Plan: Plan #2

Page: 1

Field: Uintah County, Utah  
Utah - Natural Buttes  
USA

Map System: US State Plane Coordinate System 1983  
Geo Datum: GRS 1980  
Sys Datum: Mean Sea Level

Map Zone: Utah, Central Zone  
Coordinate System: Well Centre  
Geomagnetic Model: igrf2005

Site: HCU # 13-33F  
Sec 33, T10S, R20E  
Uintah Co, Utah

Site Position: Northing: 7137417.25 ft Latitude: 39 53 59.030 N  
From: Geographic Easting: 2151348.52 ft Longitude: 109 40 43.220 W  
Position Uncertainty: 0.00 ft North Reference: True  
Ground Level: 5322.00 ft Grid Convergence: 1.17 deg

Well: HCU 13-33F

Slot Name:

Well Position: +N/-S 0.00 ft Northing: 7137417.25 ft Latitude: 39 53 59.030 N  
+E/-W 0.00 ft Easting: 2151348.52 ft Longitude: 109 40 43.220 W  
Position Uncertainty: 0.00 ft

Wellpath: Original Hole

Current Datum: Est RKB Height 5340.00 ft  
Magnetic Data: 2/12/2007  
Field Strength: 52739 nT  
Vertical Section: Depth From (TVD) +N/-S +E/-W Direction  
ft ft ft deg  
0.00 0.00 0.00 141.12

Plan: Plan #2

Date Composed: 2/12/2007  
Version: 1  
Tied-to: From Surface

Principal: Yes

### Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	141.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
540.00	0.00	141.12	540.00	0.00	0.00	0.00	0.00	0.00	141.12	
1465.03	27.75	141.12	1429.28	-171.01	137.88	3.00	3.00	0.00	141.12	
1841.96	27.75	141.12	1762.86	-307.64	248.04	0.00	0.00	0.00	0.00	
2951.99	0.00	141.12	2830.00	-512.86	413.49	2.50	-2.50	0.00	180.00	Vertical Point
8121.99	0.00	141.12	8000.00	-512.86	413.49	0.00	0.00	0.00	141.12	PBHL

### Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
540.00	0.00	141.12	540.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	1.80	141.12	599.99	-0.73	0.59	0.94	3.00	3.00	0.00	
700.00	4.80	141.12	699.81	-5.21	4.20	6.70	3.00	3.00	0.00	
800.00	7.80	141.12	799.20	-13.76	11.09	17.67	3.00	3.00	0.00	
900.00	10.80	141.12	897.87	-26.34	21.23	33.83	3.00	3.00	0.00	
1000.00	13.80	141.12	995.57	-42.92	34.60	55.13	3.00	3.00	0.00	
1100.00	16.80	141.12	1092.01	-63.46	51.16	81.51	3.00	3.00	0.00	
1200.00	19.80	141.12	1186.94	-87.90	70.87	112.91	3.00	3.00	0.00	
1300.00	22.80	141.12	1280.10	-116.18	93.67	149.23	3.00	3.00	0.00	
1400.00	25.80	141.12	1371.23	-148.21	119.49	190.38	3.00	3.00	0.00	
1465.03	27.75	141.12	1429.28	-171.01	137.88	219.67	3.00	3.00	0.00	
1500.00	27.75	141.12	1460.23	-183.69	148.10	235.96	0.00	0.00	0.00	
1600.00	27.75	141.12	1548.73	-219.94	177.32	282.52	0.00	0.00	0.00	
1700.00	27.75	141.12	1637.23	-256.19	206.55	329.08	0.00	0.00	0.00	
1800.00	27.75	141.12	1725.73	-292.44	235.77	375.64	0.00	0.00	0.00	





# Ryan Energy Technologies

## Planning Report



Company: Dominion Exploration & Product  
Field: Uintah County, Utah  
Site: HCU # 13-33F  
Well: HCU 13-33F  
Wellpath: Original Hole

Date: 2/12/2007  
Co-ordinate(N/E) Reference: Well: HCU 13-33F, True North  
Vertical (TVD) Reference: Est RKB 5340.0  
Section (VS) Reference: Well (0.00N,0.00E,141.12Azi)  
Plan: Plan #2

Page: 2

### Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
1841.96	27.75	141.12	1762.86	-307.64	248.04	395.18	0.00	0.00	0.00	
1900.00	26.30	141.12	1814.56	-328.18	264.59	421.55	2.50	-2.50	0.00	
2000.00	23.80	141.12	1905.15	-361.14	291.16	463.89	2.50	-2.50	0.00	
2100.00	21.30	141.12	1997.50	-390.99	315.23	502.24	2.50	-2.50	0.00	
2200.00	18.80	141.12	2091.43	-417.67	336.75	536.52	2.50	-2.50	0.00	
2300.00	16.30	141.12	2186.77	-441.15	355.67	566.67	2.50	-2.50	0.00	
2400.00	13.80	141.12	2283.33	-461.36	371.97	592.63	2.50	-2.50	0.00	
2500.00	11.30	141.12	2380.93	-478.27	385.61	614.36	2.50	-2.50	0.00	
2600.00	8.80	141.12	2479.99	-491.86	396.56	631.81	2.50	-2.50	0.00	
2700.00	6.30	141.12	2578.51	-502.09	404.80	644.95	2.50	-2.50	0.00	
2800.00	3.80	141.12	2678.12	-508.94	410.33	653.75	2.50	-2.50	0.00	
2900.00	1.30	141.12	2778.01	-512.40	413.12	658.20	2.50	-2.50	0.00	
2951.99	0.00	141.12	2830.00	-512.86	413.49	658.79	2.50	-2.50	0.00	Vertical Point
3000.00	0.00	141.12	2878.01	-512.86	413.49	658.79	0.00	0.00	0.00	
3076.99	0.00	141.12	2955.00	-512.86	413.49	658.79	0.00	0.00	0.00	Intermediate
3100.00	0.00	141.12	2978.01	-512.86	413.49	658.79	0.00	0.00	0.00	
3200.00	0.00	141.12	3078.01	-512.86	413.49	658.79	0.00	0.00	0.00	
3300.00	0.00	141.12	3178.01	-512.86	413.49	658.79	0.00	0.00	0.00	
3400.00	0.00	141.12	3278.01	-512.86	413.49	658.79	0.00	0.00	0.00	
3500.00	0.00	141.12	3378.01	-512.86	413.49	658.79	0.00	0.00	0.00	
3600.00	0.00	141.12	3478.01	-512.86	413.49	658.79	0.00	0.00	0.00	
3661.99	0.00	141.12	3540.00	-512.86	413.49	658.79	0.00	0.00	0.00	Wasatch Tongue
3700.00	0.00	141.12	3578.01	-512.86	413.49	658.79	0.00	0.00	0.00	
3800.00	0.00	141.12	3678.01	-512.86	413.49	658.79	0.00	0.00	0.00	
3900.00	0.00	141.12	3778.01	-512.86	413.49	658.79	0.00	0.00	0.00	
4000.00	0.00	141.12	3878.01	-512.86	413.49	658.79	0.00	0.00	0.00	
4031.99	0.00	141.12	3910.00	-512.86	413.49	658.79	0.00	0.00	0.00	Uteland Limestone
4100.00	0.00	141.12	3978.01	-512.86	413.49	658.79	0.00	0.00	0.00	
4191.99	0.00	141.12	4070.00	-512.86	413.49	658.79	0.00	0.00	0.00	Wasatch
4200.00	0.00	141.12	4078.01	-512.86	413.49	658.79	0.00	0.00	0.00	
4300.00	0.00	141.12	4178.01	-512.86	413.49	658.79	0.00	0.00	0.00	
4400.00	0.00	141.12	4278.01	-512.86	413.49	658.79	0.00	0.00	0.00	
4500.00	0.00	141.12	4378.01	-512.86	413.49	658.79	0.00	0.00	0.00	
4600.00	0.00	141.12	4478.01	-512.86	413.49	658.79	0.00	0.00	0.00	
4700.00	0.00	141.12	4578.01	-512.86	413.49	658.79	0.00	0.00	0.00	
4800.00	0.00	141.12	4678.01	-512.86	413.49	658.79	0.00	0.00	0.00	
4900.00	0.00	141.12	4778.01	-512.86	413.49	658.79	0.00	0.00	0.00	
5000.00	0.00	141.12	4878.01	-512.86	413.49	658.79	0.00	0.00	0.00	
5100.00	0.00	141.12	4978.01	-512.86	413.49	658.79	0.00	0.00	0.00	
5111.99	0.00	141.12	4990.00	-512.86	413.49	658.79	0.00	0.00	0.00	Chapita Wells
5200.00	0.00	141.12	5078.01	-512.86	413.49	658.79	0.00	0.00	0.00	
5300.00	0.00	141.12	5178.01	-512.86	413.49	658.79	0.00	0.00	0.00	
5400.00	0.00	141.12	5278.01	-512.86	413.49	658.79	0.00	0.00	0.00	
5500.00	0.00	141.12	5378.01	-512.86	413.49	658.79	0.00	0.00	0.00	
5600.00	0.00	141.12	5478.01	-512.86	413.49	658.79	0.00	0.00	0.00	
5700.00	0.00	141.12	5578.01	-512.86	413.49	658.79	0.00	0.00	0.00	
5800.00	0.00	141.12	5678.01	-512.86	413.49	658.79	0.00	0.00	0.00	
5900.00	0.00	141.12	5778.01	-512.86	413.49	658.79	0.00	0.00	0.00	
6000.00	0.00	141.12	5878.01	-512.86	413.49	658.79	0.00	0.00	0.00	
6100.00	0.00	141.12	5978.01	-512.86	413.49	658.79	0.00	0.00	0.00	
6200.00	0.00	141.12	6078.01	-512.86	413.49	658.79	0.00	0.00	0.00	
6300.00	0.00	141.12	6178.01	-512.86	413.49	658.79	0.00	0.00	0.00	
6336.99	0.00	141.12	6215.00	-512.86	413.49	658.79	0.00	0.00	0.00	Uteland Buttes
6400.00	0.00	141.12	6278.01	-512.86	413.49	658.79	0.00	0.00	0.00	



# Ryan Energy Technologies Planning Report



Company: Dominion Exploration & Product  
Field: Uintah County, Utah  
Site: HCU # 13-33F  
Well: HCU 13-33F  
Wellpath: Original Hole

Date: 2/12/2007  
Co-ordinate(NE) Reference: Well: HCU 13-33F, True North  
Vertical (TVD) Reference: Est RKB 5340.0  
Section (VS) Reference: Well (0.00N,0.00E,141.12Azi)  
Plan: Plan #2

Page: 3

## Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
6500.00	0.00	141.12	6378.01	-512.86	413.49	658.79	0.00	0.00	0.00	
6600.00	0.00	141.12	6478.01	-512.86	413.49	658.79	0.00	0.00	0.00	
6700.00	0.00	141.12	6578.01	-512.86	413.49	658.79	0.00	0.00	0.00	
6800.00	0.00	141.12	6678.01	-512.86	413.49	658.79	0.00	0.00	0.00	
6900.00	0.00	141.12	6778.01	-512.86	413.49	658.79	0.00	0.00	0.00	
7000.00	0.00	141.12	6878.01	-512.86	413.49	658.79	0.00	0.00	0.00	
7100.00	0.00	141.12	6978.01	-512.86	413.49	658.79	0.00	0.00	0.00	
7200.00	0.00	141.12	7078.01	-512.86	413.49	658.79	0.00	0.00	0.00	
7261.99	0.00	141.12	7140.00	-512.86	413.49	658.79	0.00	0.00	0.00	Mesaverde
7300.00	0.00	141.12	7178.01	-512.86	413.49	658.79	0.00	0.00	0.00	
7400.00	0.00	141.12	7278.01	-512.86	413.49	658.79	0.00	0.00	0.00	
7500.00	0.00	141.12	7378.01	-512.86	413.49	658.79	0.00	0.00	0.00	
7600.00	0.00	141.12	7478.01	-512.86	413.49	658.79	0.00	0.00	0.00	
7700.00	0.00	141.12	7578.01	-512.86	413.49	658.79	0.00	0.00	0.00	
7800.00	0.00	141.12	7678.01	-512.86	413.49	658.79	0.00	0.00	0.00	
7900.00	0.00	141.12	7778.01	-512.86	413.49	658.79	0.00	0.00	0.00	
8000.00	0.00	141.12	7878.01	-512.86	413.49	658.79	0.00	0.00	0.00	
8100.00	0.00	141.12	7978.01	-512.86	413.49	658.79	0.00	0.00	0.00	
8121.99	0.00	141.12	8000.00	-512.86	413.49	658.79	0.00	0.00	0.00	PBHL

## Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	← Latitude → Deg Min Sec	← Longitude → Deg Min Sec
Vertical Point			2830.00	-512.86	413.49	7136912.912151772.37	39 53 53.961 N	109 40 37.914 W	
-Plan hit target									
PBHL			8000.00	-512.86	413.49	7136912.912151772.37	39 53 53.961 N	109 40 37.914 W	
-Plan hit target									

## Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
3076.99	2955.00	9.625	9.625	Intermediate

## Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
3661.99	3540.00	Wasatch Tongue		0.00	0.00
4031.99	3910.00	Uteland Limestone		0.00	0.00
4191.99	4070.00	Wasatch		0.00	0.00
5111.99	4990.00	Chapita Wells		0.00	0.00
6336.99	6215.00	Uteland Buttes		0.00	0.00
7261.99	7140.00	Mesaverde		0.00	0.00

## FACSIMILE COVER PAGE

**To :** Utah Division of Oil, Gas & Mining  
**Sent :** 3/14/2007 at 4:02:54 PM  
**Subject :** HCU 13-33F

**From :** g  
**Pages :** 3 (including Cover)

**CONFIDENTIAL**

43-047-36685  
33 10s 20e

RECEIVED

MAR 14 2007

DIV. OF OIL, GAS & MINING



## WELL CHRONOLOGY REPORT

**WELL NAME : HCU 13-33F**

Event No: 1

DISTRICT : WESTERN

FIELD : NATURAL BUTTES 630

LOCATION : 1214' FSL 356' FWL SEC 33 T 10S R 20E

COUNTY &amp; STATE : UTAH

UT

CONTRACTOR :

WI % : 100.00 AFE # : 0602708

API # : 43-047-36685

PLAN DEPTH : 8,067

SPUD DATE : 07/25/06

DHC : \$800,500

CWC : \$658,500

AFE TOTAL : \$1,459,000

FORMATION : WASATCH/MESAVERDE

EVENT DC : \$936,627.00

EVENT CC : \$0.00

EVENT TC : \$936,627.00

WELL TOTL COST : \$936,627

**REPORT DATE: 03/07/07**

MD : 2,899

TVD : 2,779

DAYS :

MW : 9.5

VISC : 36

DAILY : DC : \$76,620.00

CC : \$0.00

TC : \$76,620.00

CUM : DC : \$447,389.00

CC : \$0.00

TC : \$447,389.00

DAILY DETAILS: DIREC DRLG F/ 2845 TO 2899 COND MUD AND CIRC TOOH LD 8" TOOLS RU CSG CREW RUN 2821' OF 9 5/8 J-55, 36#, ST&C 8RD CSG TO 2821 KB CEMENT CSG W/ 400 SKS OF LEAD W/ 16% GEL, 10#/SK GILSONITE, 3#/SK GR-3, 3% SALT, 1/4#/SK FLOCELE, 11 PPG, 3.82 CUFT/SK, 23 GAL WATER/SK, FOLLOWED BY 250 SKS OF TAIL W/2% CALC CHLORIDE, 1/4#/SK FLOCELE, 15.8 PPG, 1.15 CUFT/SK, 5 GAL WATER/SK FLOATS HELD 70 BBLs CEMENT TO SURFACE WOC

**REPORT DATE: 03/08/07**

MD : 3,266

TVD : 3,146

DAYS :

MW : 8.5

VISC : 26

DAILY : DC : \$118,290.00

CC : \$0.00

TC : \$118,290.00

CUM : DC : \$565,679.00

CC : \$0.00

TC : \$565,679.00

DAILY DETAILS: WOC ND DIVERter INSTALL WELLHEAD NU BOPE TEST BOPE PU BHA & DP DRLG CEMENT FLT AND SHOE DRLG F/ 2899 TO 3266

**REPORT DATE: 03/09/07**

MD : 5,420

TVD : 5,300

DAYS :

MW : 8.6

VISC : 26

DAILY : DC : \$36,840.00

CC : \$0.00

TC : \$36,840.00

CUM : DC : \$602,519.00

CC : \$0.00

TC : \$602,519.00

DAILY DETAILS: DRLG F/ 3266 TO 3392 SURVEY DIR DRLR FORGOT FLUID DRLG F/ 3392 TO 3424 SURVEY @ 3340 2.5 DEG @ 215 AZ DRLG F/ 3424 TO 4089 RIG SERVICE DRLG F/ 4089 TO 4406 SURVEY @ 4342 2 DEG @ 200 AZ DRLG F/ 4406 TO 5420 SURVEY @ 5330

**REPORT DATE: 03/10/07**

MD : 7,198

TVD : 7,098

DAYS : 8

MW : 8.6

VISC : 26

DAILY : DC : \$38,860.00

CC : \$0.00

TC : \$38,860.00

CUM : DC : \$641,379.00

CC : \$0.00

TC : \$641,379.00

DAILY DETAILS: DRLG FROM 5420' TO A DEPTH OF 6247'. W/ 18K WOB & 45 RPMS. RIG SERVICE & BOP DRILL DRLG FROM 6247' TO A DPETH OF 6407'. W/ 18K WOB & 45 RPMS. WIRELINE SURVEY @ 6304' = 1.75° & 157 AZ. DRLG FROM 6407' TO A DPETH OF 6627'. W/ 18K WOB & 45 RPMS. WORK ON #1 PUMP. DRLG FROM 6627' TO A DEPTH OF 7198'. W/ 18K WOB & 45 RPMS.

**REPORT DATE: 03/11/07**

MD : 8,275

TVD : 8,147

DAYS : 9

MW : 8.6

VISC : 26

DAILY : DC : \$32,790.00

CC : \$0.00

TC : \$32,790.00

CUM : DC : \$674,169.00

CC : \$0.00

TC : \$674,169.00

DAILY DETAILS: DRLG FROM 7198' TO A DEPTH OF 7388'. W/ 25K WOB & 45 RPMS. WIRELINE SURVEY @ 7296' = 2° & 141 AZ. DRLG FROM 7388' TO A DEPTH OF 7705'. W/ 25K WOB & 45 RPMS. RIG SERVICE & BOP / FIRE DRILL ( 110 SECS.) DRLG FROM 7705' TO A DEPTH OF 7832'. W/ 25K WOB & 45 RPMS. WIRELINE SURVEY @ 7704' = 2° & 160 AZ DRLG FROM 7832' TO A DEPTH OF 7904'. W/ 25K WOB & 45 RPMS. WORK TIGHT HOLE / STUCK PIPE. DRLG FROM 7904' TO A DEPTH OF 8275'. W/ 25K WOB & 45 RPMS.

**REPORT DATE: 03/12/07**

MD : 8,275

TVD : 8,147

DAYS : 10

MW : 9.1

VISC : 38

DAILY : DC : \$74,037.00

CC : \$0.00

TC : \$74,037.00

CUM : DC : \$748,206.00

CC : \$0.00

TC : \$748,206.00

DAILY DETAILS: CIRCULATE WELL BORE CLEAN, AND TO A 9.1 PPG & 38 VIS. TOH W/ DRILL STRING & BHA. RIG UP SCHLUMBERGER. RUN E-LOGS. LOGGER TD OF 8274'. TIH W/ TRI CONE & BHA, DRILL STRING. BREAK CIRCULATION. WASH 30' TO BTM. CIRCULATE TO A 9.1 PPG & 38 VIS. RIG UP LAY DOWN MACHINE. LAY DOWN DRILL STRING.

**WELL CHRONOLOGY REPORT****WELL NAME : HCU 13-33F**

Event No: 1

DISTRICT : WESTERN

FIELD : NATURAL BUTTES 630

LOCATION : 1214' FSL 356' FWL SEC 33 T 10S R 20E

COUNTY &amp; STATE : UINTAH

UT

CONTRACTOR :

WI % : 100.00 AFE # : 0602708

API # : 43-047-36685

PLAN DEPTH : 8,067

SPUD DATE : 07/25/06

DHC : \$800,500

CWC : \$658,500

AFE TOTAL : \$1,459,000

FORMATION : WASATCH/MESAVERDE

EVENT DC: \$936,627.00

EVENT CC: \$0.00

EVENT TC: \$936,627.00

WELL TOTL COST: \$936,627

**REPORT DATE: 03/13/07**

MD : 8,275

TVD : 8,147

DAYS : 11

MW :

VISC :

DAILY : DC : \$188,421.00

CC : \$0.00

TC : \$188,421.00

CUM : DC: \$936,627.00

CC : \$0.00

TC : \$936,627.00

DAILY DETAILS : LAY DOWN DRILL STRING & BHA.. BREAK KELLY. RIG UP CSGN CREW. RUN 196 JT'S 5.5", 17#, M-80 CSGN. SET @ 8243'/KB. BREAK CIRCULATION. RIG DOWN CSGN CREW. RIG UP BIG 4. CEMENT W/ 100 SKS LEAD MIXED @ 11.0 PPG & 3.82 YLD, THEN 625 SKS TAIL MIXED @ 13.0 PPG & 1.85 YLD. WITH GOOD RETURNS. DISPLACE W/ 190 BBLS 2% KCL. NIPPLE DOWN CLEAN PITS. PREPARE TO RIG DOWN. RELEASE RIG @ 6:00AM. ON 3-13-07. MOVE TO HCU 15-28F

RECEIVED  
MAR 14 2007  
DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires: November 30, 2000

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

RECEIVED  
VERNAL FIELD OFFICE  
2007 FEB -5 PM 3:14

1. Type of Well

☐

Oil Well

☒

Gas Well

☐

Other

2. Name of Operator

Dominion Exploration & Production, Inc.

3a. Address

14000 Quail Springs Pkwy, Ste 600, OKC, OK 73134

3b. Phone No. (include area code)

(405) 749-5237

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SHL: 1214' FSL & 356' FWL, SW SW, Sec. 33-10S-20E

BHL: 700' FSL & 800' FWL, SW SW, Sec. 33-10S-20E

5. Lease Serial No.

11-28203

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

Hill Creek Unit

8. Well Name and No.

HCU 13-33F

9. API Well No.

43-047-36685

10. Field and Pool, or Exploratory Area

Natural Buttes

11. County or Parish, State

Uintah, UT

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	APD Extension
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13 Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

The federal APD for this well expires February 24, 2007. Dominion requests a one year extension

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MAR 19 2007

DIV. OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Barbara Lester

Title Regulatory Specialist

Signature

*Barbara Lester*

Date 1/30/2007

Approved by

*[Signature]*

Petroleum Engineer

Date FEB 26 2007

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

CONDITIONS OF APPROVAL ATTACHED

UDOGM

# **CONDITIONS OF APPROVAL**

## **Dominion Exploration & Production, Inc.**

### **Notice of Intent APD Extension**

**Lease:** UTU-28203  
**Well:** HCU 13-33F  
**Location:** SWSW Sec 33-T10S-R20E

An extension for the referenced APD is granted with the following conditions:

---

1. The extension and APD shall expire on 2/24/08.
2. No other extension shall be granted.

If you have any other questions concerning this matter, please contact Ryan Angus of this office at (435) 781-4430

## FACSIMILE COVER PAGE

To : Utah Division of Oil, Gas & Mining

Sent : 3/22/2007 at 10:55:26 AM

Subject : HCU 13-33F

From : g

Pages : 2 (including Cover)

**CONFIDENTIAL**

43-047-36685  
33-10s 20e

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DIV. OF OIL, GAS & MINING



**WELL CHRONOLOGY REPORT****WELL NAME : HCU 13-33F**

Event No: 1

DISTRICT : WESTERN

FIELD : NATURAL BUTTES 630

LOCATION : 1214' FSL 356' FWL SEC 33 T 10S R 20E

COUNTY &amp; STATE : UTAH

UT

CONTRACTOR :

WI % : 100.00 AFE # : 0602708

API # : 43-047-36685

PLAN DEPTH : 8,067

SPUD DATE : 07/25/06

DHC : \$800,500

CWC : \$658,500

AFE TOTAL : \$1,459,000

FORMATION : WASATCH/MESAVERDE

EVENT DC : \$936,627.00

EVENT CC : \$17,169.00

EVENT TC : \$953,796.00

WELL TOTL COST : \$953,796

**REPORT DATE: 03/16/07**

MD : 8,275

TVD : 8,147

DAYS : 12

MW : 0

VISC : 0

DAILY : DC : \$0.00

CC : \$17,169.00

TC : \$17,169.00

CUM : DC : \$936,627.00

CC : \$17,169.00

TC : \$953,796.00

DAILY DETAILS: MIRU SCHLUMBERGER WIRE LINE AND ACTION HOT OIL SERVICE. RUN CMT BOND LOG UNDER 1500#  
PRESSURE FROM W.L. PBTD @ 8161' KB TO 2100' KB, FOUND CMT TOP @ 2350' KB. POOH W/ WIRE LINE,  
AND PRESSURE TESTED CSG TO 5000 PSI, HELD GOOD. RIH AND PERFORATED STAGE #1, SHUT WELL IN,  
RDMO WIRE LINE AND HOT OILIER. WAIT ON FRAC DATE.

**RECEIVED****MAR 22 2007**

DIV. OF OIL, GAS &amp; MINING

## FACSIMILE COVER PAGE

**To :** Utah Division of Oil, Gas & Mining

**From :** g

**Sent :** 3/28/2007 at 3:08:54 PM

**Pages :** 6 (including Cover)

**Subject :** HCU 13-33F

**CONFIDENTIAL**

43-047-36685  
33 10s 20

**RECEIVED**

**MAR 28 2007**

DIV. OF OIL, GAS & MINING



## WELL CHRONOLOGY REPORT

**WELL NAME : HCU 13-33F**

Event No: 1

DISTRICT : WESTERN

FIELD : NATURAL BUTTES 630

LOCATION : 1214' FSL 356' FWL SEC 33 T 10S R 20E

COUNTY &amp; STATE : UTAH

UT

CONTRACTOR :

WI % : 100.00 AFE # : 0602708

API # : 43-047-36685

PLAN DEPTH : 8,067 SPUD DATE : 07/25/06

DHC : \$800,500

CWC : \$658,500

AFE TOTAL : \$1,459,000

FORMATION : WASATCH/MESAVERDE

EVENT DC : \$936,627.00

EVENT CC : \$319,942.00

EVENT TC : \$1,256,569.00

WELL TOTL COST : \$1,256,569

REPORT DATE: 03/13/07

MD : 8,275

TVD : 8,147

DAYS : 11

MW :

VISC :

DAILY : DC : \$188,421.00

CC : \$0.00

TC : \$188,421.00

CUM : DC : \$936,627.00

CC : \$0.00

TC : \$936,627.00

DAILY DETAILS: LAY DOWN DRILL STRING & BHA.. BREAK KELLY. RIG UP CSGN CREW. RUN 196 JT'S 5.5", 17#, M-80 CSGN. SET @ 8243'/KB. BREAK CIRCULATION. RIG DOWN CSGN CREW. RIG UP BIG 4. CEMENT W/ 100 SKS LEAD MIXED @ 11.0 PPG & 3.82 YLD, THEN 625 SKS TAIL MIXED @ 13.0 PPG & 1.85 YLD. WITH GOOD RETURNS. DISPLACE W/ 190 BBLs 2% KCL. NIPPLE DOWN CLEAN PITS. PREPARE TO RIG DOWN. RELEASE RIG @ 6:00AM. ON 3-13-07. MOVE TO HCU 15-28F

REPORT DATE: 03/16/07

MD : 8,275

TVD : 8,147

DAYS : 12

MW : 0

VISC : 0

DAILY : DC : \$0.00

CC : \$17,169.00

TC : \$17,169.00

CUM : DC : \$936,627.00

CC : \$17,169.00

TC : \$953,796.00

DAILY DETAILS: MIRU SCHLUMBERGER WIRE LINE AND ACTION HOT OIL SERVICE. RUN CMT BOND LOG UNDER 1500# PRESSURE FROM W.L. PBTD @ 8161' KB TO 2100' KB, FOUND CMT TOP @ 2350' KB. POOH W/ WIRE LINE, AND PRESSURE TESTED CSG TO 5000 PSI, HELD GOOD. RIH AND PERFORATED STAGE #1, SHUT WELL IN, RDMO WIRE LINE AND HOT OILIER. WAIT ON FRAC DATE.

**RECEIVED**
**MAR 28 2007**

**WELL CHRONOLOGY REPORT****WELL NAME : HCU 13-33F**

Event No: 1

DISTRICT : WESTERN

FIELD : NATURAL BUTTES 630

LOCATION : 1214' FSL 356' FWL SEC 33 T 10S R 20E

COUNTY &amp; STATE : UTAH

UT

CONTRACTOR :

WI % : 100.00 AFE # : 0602708

API # : 43-047-36685

PLAN DEPTH : 8,067 SPUD DATE : 07/25/06

DHC : \$800,500

CWC : \$658,500

AFE TOTAL : \$1,459,000

FORMATION : WASATCH/MESAVERDE

EVENT DC: \$936,627.00

EVENT CC: \$319,942.00

EVENT TC: \$1,256,569.00

WELL TOTL COST: \$1,256,569

**REPORT DATE: 03/23/07**

MD : 8,275

TVD : 8,147

DAYS : 13

MW : 0

VISC : 0

DAILY : DC : \$0.00

CC : \$220,071.00

TC : \$220,071.00

CUM : DC: \$936,627.00

CC : \$237,240.00

TC : \$1,173,867.00

DAILY DETAILS :

**RECEIVED****MAR 28 2007**

DIV. OF OIL, GAS &amp; MINING



## WELL CHRONOLOGY REPORT

**WELL NAME : HCU 13-33F**

DISTRICT : WESTERN

FIELD : NATURAL BUTTES 630

Event No: 1

LOCATION : 1214' FSL 356' FWL SEC 33 T 10S R 20E

COUNTY &amp; STATE : UTAH

UT

CONTRACTOR :

WI % : 100.00 AFE # : 0602708

API # : 43-047-36685

PLAN DEPTH : 8,067

SPUD DATE : 07/25/06

DHC : \$800,500

CWC : \$658,500

AFE TOTAL : \$1,459,000

FORMATION : WASATCH/MESAVERDE

EVENT DC: \$936,627.00

EVENT CC: \$319,942.00

EVENT TC: \$1,256,569.00

WELL TOTL COST: \$1,256,569

03-22-07 HCU 13-33F. MIRU SCHLUMBERGER frac equipment, tested lines to 7000 psi. Held safety meeting with all personnel. Quality control on gel & breaker systems with on-site lab was verified. Frac'd Mesa Verde Interval # 1, 7876-80', 7884-90', 2 spf, 7935-38', 7952-56', 1 spf, 8004-11', 2 spf, 8072-74', 1 spf, 8078-83', 2 spf, 60 holes, with 101,542# 20/40 Ottawa sand. Pumped frac at an average rate of 41.8 bpm, using 334.6 mscf of N2 and 740 bbls of fluid. Average surface treating pressure was 4352 psi with sand concentrations stair stepping from 2.0 ppg to 6.0 ppg. 5582 gallons Pad YF120ST/N2 gel.

2854 gallons YF120ST/N2 pumped @ 2.0 ppg sand concentration.

2821 gallons YF120ST/N2 pumped @ 3.0 ppg sand concentration.

3521 gallons YF120ST/N2 pumped @ 4.0 ppg sand concentration.

4221 gallons YF120ST/N2 pumped @ 5.0 ppg sand concentration.

4385 gallons YF120ST/N2 pumped @ 6.0 ppg sand concentration.

7670 gallons WF110 slick water flush.

Total frac fluid pumped 740 bbls. N2 was cut during flush. Ru wire line, RIH and set 8K frac plug @ 7840'. RIH and perforate interval #2 @ 7774-78', 2 spf, 7788-7800', 4 spf, 58 holes. Left an 18" sleeve off of the setting tool in the hole. Fraced interval #2 w/ 44,620# 20/40 Ottawa sand. Pumped frac at an avg rate of 33.1 bpm, using 174.5 mscf of N2 and 464 bbls of fluid. Avg surface treating pressure was 4618 psi w/ sand concentrations stair stepping from 2.0 ppg to 6.0 ppg.

2788 gallons Pad YF120ST/N2 gel.

2148 gallons YF120ST/N2 pumped @ 2.0 ppg sand concentration.

2116 gallons YF120ST/N2 pumped @ 3.0 ppg sand concentration.

2114 gallons YF120ST/N2 pumped @ 4.0 ppg sand concentration.

2720 gallons YF120ST/N2 pumped @ 6.0 ppg sand concentration.

7591 gallons WF110 slick water flush.

Total frac fluid pumped 464 bbls. N2 was cut during flush. RIH and set 8K frac plug @ 7750', perforate interval # 3 @ 7681-85', 2 spf, 7690-7706', 3 spf, 58 holes. Fraced interval #3 w/ 60,731# 20/40 Ottawa sand. Pumped frac at an avg rate of 34 bpm, using 205 mscf of N2 and 514 bbls of fluid. Avg surface treating pressure was 4774 psi w/ sand concentrations stair stepping from 2.0 ppg to 6.0 ppg.

2787 gallons Pad YF120ST/N2 gel.

2147 gallons YF120ST/N2 pumped @ 2.0 ppg sand concentration.

2119 gallons YF120ST/N2 pumped @ 3.0 ppg sand concentration.

2115 gallons YF120ST/N2 pumped @ 4.0 ppg sand concentration.

2115 gallons YF120ST/N2 pumped @ 5.0 ppg sand concentration.

2794 gallons YF120ST/N2 pumped @ 6.0 ppg sand concentration.

7506 gallons WF110 slick water flush.

Total frac fluid pumped 514 bbls. N2 was cut during flush. RIH and set 5K frac plug @ 7660', perforate interval # 4 @ 7589-7602', 1 spf, 7611-21', 4 spf, 55 holes. Fraced interval #4 w/ 48,964# 20/40 Ottawa sand. Pumped frac at an avg rate of 28.7 bpm, using 178.9 mscf of N2 and 473 bbls of fluid. Avg surface treating pressure was 4009 psi w/ sand concentrations stair stepping from 2.0 ppg to 6.0 ppg.

2793 gallons Pad YF120ST/N2 gel.

2143 gallons pumped YF120ST/N2 @ 2.0 ppg sand concentration.

2117 gallons pumped YF120ST/N2 @ 3.0 ppg sand concentration.

2113 gallons pumped YF120ST/N2 @ 4.0 ppg sand concentration.

1554 gallons pumped YF120ST/N2 @ 5.0

ppg sand concentration.

1788 gallons pumped YF120ST/N2 @ 6.0 ppg sand concentration.

7351 gallons WF110 slick water flush.

Total frac fluid pumped 473 bbls. N2 was cut during flush. RIH and set 5K frac plug @ 6420', perforate interval # 5 @ 6159-64', 3 spf, 6177-79', 6181-83', 2 spf, 6191-99', 3 spf, 51 holes. Fraced interval #5 w/ 59,897# 20/40 Ottawa sand. Pumped frac at an avg rate of 32.4 bpm, using 166.9 mscf of N2 and 472 bbls of fluid. Avg surface treating pressure was 2748 psi w/ sand concentrations stair stepping from 2.0 ppg to 6.0 ppg.

2795 gallons Pad YF115ST/N2 gel.

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MAR 28 2007



## WELL CHRONOLOGY REPORT

**WELL NAME : HCU 13-33F**

DISTRICT : WESTERN

FIELD : NATURAL BUTTES 630

Event No: 1

LOCATION : 1214' FSL 356' FWL SEC 33 T 10S R 20E

COUNTY &amp; STATE : UTAH

UT

CONTRACTOR :

WI % : 100.00 AFE # : 0602708

API # : 43-047-36685

PLAN DEPTH : 8,067

SPUD DATE : 07/25/06

DHC : \$800,500

CWC : \$658,500

AFE TOTAL : \$1,459,000

FORMATION : WASATCH/MESAVERDE

EVENT DC: \$936,627.00

EVENT CC: \$319,942.00

EVENT TC: \$1,256,569.00

WELL TOTL COST: \$1,256,569

2147 gallons YF115ST/N2 pumped @ 2.0 ppg sand concentration.

2118 gallons YF115ST/N2 pumped @ 3.0 ppg sand concentration.

2114 gallons YF115ST/N2 pumped @ 4.0 ppg sand concentration.

2112 gallons YF115ST/N2 pumped @ 5.0 ppg sand concentration.

2579 gallons YF115ST/N2 pumped @ 6.0 ppg

5977 gallons WF110

sand concentration.

slick water flush.

Total frac fluid pumped 472 bbls. N2 was cut during flush. RIH set top kill plug @ 6100', POOH, RDMO wireline, and stimulation equipment. Prep to MIRU Rig in the morning.

REPORT DATE: 03/24/07

MD : 8,275

TVD : 8,147

DAYS : 14

MW : 0

VISC : 0

DAILY : DC : \$0.00

CC : \$14,195.00

TC : \$14,195.00

CUM : DC: \$936,627.00

CC : \$251,435.00

TC : \$1,188,062.00

DAILY DETAILS: MIRU RIG AND EQUIPMENT, RU WORKING FLOOR, AND QUICK TEST. TEST ALL FLANGES ON STACK, HYDRILL WOULD NOT TEST. RD FLOOR, AND ND HYDRILL. LOWER FLOOR, RIH W/ 4-3/4" FANG MILL, FLOAT SUB, BRS, PSN AND 194 JTS OF TBG. RD FLOOR, CHANGE OUT ELEMENT IN HYDRILL, AND CHANGE PIPE RAMS TO SNUBBING RAMS. NU HYDRILL, AND RU WORKING FLOOR. SHUT WELL IN W/ EOT @ 6060' KB. PREP TO TEST BOPE IN THE MORNING.

NOTE: AZTEC DELIVERED 268 JTS OF 2-3/8" 4.7# N-80 8RD TBG.

REPORT DATE: 03/25/07

MD : 8,275

TVD : 8,147

DAYS : 15

MW : 0

VISC : 0

DAILY : DC : \$0.00

CC : \$8,070.00

TC : \$8,070.00

CUM : DC: \$936,627.00

CC : \$259,505.00

TC : \$1,196,132.00

DAILY DETAILS: SICP 300#, BLED DN CSG. RU QUICK TEST, TEST PIPE RAMS, AND KNIGHT HYDRILL. HYDRILL WOULD NOT TEST, RD FLOOR, AND ND HYDRILL. WAIT ON WEATHERFORD HYDRILL, NU NEW HYDRILL, UNABLE TO TEST KNIGHT OR WEATHERFORD HYDRILLS. WORK TBG THRU WEATHERFORD HYDRILL, UP AND DOWN AND ROTATING DRY. HYDRILL TESTED TO 3000#. RDMO TESTER, PREP TO DRILL OUT PLUGS IN THE MORNING.

REPORT DATE: 03/26/07

MD : 8,275

TVD : 8,147

DAYS : 16

MW : 0

VISC : 0

DAILY : DC : \$0.00

CC : \$12,972.00

TC : \$12,972.00

CUM : DC: \$936,627.00

CC : \$272,477.00

TC : \$1,209,104.00

DAILY DETAILS: SICP 0#, SITP 0#, BLED DN WELL, PU 2 JTS OF TBG TAG CKP @ 6100' KB. MILL OUT PLUGS @ 6100', (20' OF SAND) 6420', (40' OF SAND) 7660', (34' OF SAND) 7750', AND (38' OF SAND) FISH @ 7840', MILL FOR 5 HOURS, MADE 4' AND PLUG STARTED COMING UP HOLE W/ PRESSURE INCREASE FROM BELOW. POOH W/ 55 JTS TO STRING FLOAT. REMOVE FLOAT AND SHUT WELL IN OVERNIGHT W/ EOT @ 6093' KB. PREP TO FINISH C/O IN THE MORNING.

NOTE: DOUBLE TIME FOR RIG ON SUNDAY.

REPORT DATE: 03/27/07

MD : 8,275

TVD : 8,147

DAYS : 17

MW : 0

VISC : 0

DAILY : DC : \$0.00

CC : \$46,379.00

TC : \$46,379.00

CUM : DC: \$936,627.00

CC : \$318,856.00

TC : \$1,255,483.00

DAILY DETAILS: SICP 1750#, SITP 0#, RIH W/ 56 JTS OF TBG, TAG 5TH PLUG @ 7840' KB. MILL ON FISH REMAINS AND CKP FOR ONE HOUR AND FELL THRU. RIH TAG SAND @ 8112', C/O 73' OF SAND TO PBTD @ 8185' KB. CIRCULATE WELL CLEAN, LD 10 JTS OF TBG, LAND 252 JTS ON HANGER W/ EOT @ 7877', AND PSN @ 7875' KB. RD WORKING FLOOR, ND BOPE, DROP BALL, AND NU WELL HEAD. PUMP OFF BIT, FLOAT SUB, AND 1/2 OF BRS @ 2500#. RD RIG AND EQUIPMENT, PREP TO MOVE IN THE MORNING.

RECEIVED  
MAR 28 2007



## WELL CHRONOLOGY REPORT

**WELL NAME : HCU 13-33F**

DISTRICT : WESTERN

FIELD : NATURAL BUTTES 630

Event No: 1

LOCATION : 1214' FSL 356' FWL SEC 33 T 10S R 20E

COUNTY &amp; STATE : UTAH

UT

CONTRACTOR :

WI % : 100.00 AFE # : 0602708

API # : 43-047-36685

PLAN DEPTH : 8,067

SPUD DATE : 07/25/06

DHC : \$800,500

CWC : \$658,500

AFE TOTAL : \$1,459,000

FORMATION : WASATCH/MESAVERDE

EVENT DC: \$936,627.00

EVENT CC: \$319,942.00

EVENT TC: \$1,256,569.00

WELL TOTL COST: \$1,256,569

REPORT DATE: 03/28/07

MD : 8,275

TVD : 8,147

DAYS : 18

MW :

VISC :

DAILY : DC : \$0.00

CC : \$1,086.00

TC : \$1,086.00

CUM : DC: \$936,627.00

CC : \$319,942.00

TC : \$1,256,569.00

DAILY DETAILS : FLOW REPORT OPEN WELL TO PIT UP TBG. @ 7:00 PM ON 24/64 CHOKE FTP 650, SICP 1830, WELL LOADED UP @ 6:00 AM FTP 0, SICP 2000, RECOVERED 500 BBLS FLUID REMOVE CHOKE & LEFT OPEN TO PIT MIRU DELSCO SWAB RIG START SWAB FL @ 800' MADE 7 RUNS WELL FLOWED RECOVERED 80 BBLS FLUID RD SWAB RIG MOVE OFF, LEFT WELL FLOWING UP TBG. TO PIT ON 24/64 CHOKE.

RECEIVED

MAR 28 2007

DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**CONFIDENTIAL**

FORM APPROVED  
OMB No. 1004-0135  
Expires: November 30, 2000

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an**  
**abandoned well. Use Form 3160-3 (APD) for such proposals.**

*SUBMIT IN TRIPLICATE - Other Instructions on reverse side*

1. Type of Well

☐ Oil Well

☒ Gas Well

☐ Other

2. Name of Operator

Dominion Exploration & Production, Inc.

3a. Address

14000 Quail Springs Pkwy, Ste 600, OKC, OK 73134

3b. Phone No. (include area code)

(405) 749-5237

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SHL: 1214' FSL & 356' FWL, SW SW, Sec. 33-10S-20E

BHL: 700' FSL & 800' FWL, SW SW, Sec. 33-10S-20E

5. Lease Serial No.

U-28203

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

Hill Creek Unit

8. Well Name and No.

HCU 13-33F

9. API Well No.

43-047-36685

10. Field and Pool, or Exploratory Area

Natural Buttes

11. County or Parish, State

Uintah, UT

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Drilling Operations
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13 Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

3/6/07 - Ran 65 jts 9-5/8", 36#, J-55 ST&C csg set @ 2821'. Cmt lead w/400 sks Hi-Fill V, 11.0 ppg, 3.82 yld. Tailed w/250 sks Class G, 15.8 ppg, 1.15 yld. 70 bbls cmt to surface.

3/12/07 - Ran 196 jts 5-1/2", 17#, M-80 LT&C csg set @ 8243'. Cmt lead w/100 sks Hi-Fill V, 11.0 ppg, 3.82 yld. Tailed w/625 sks Class G, 13.0 ppg, 1.85 yld w/good returns. Clean pits.

3/13/07 - Rig released.

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Barbara Lester

Title Regulatory Specialist

Signature

*Barbara Lester*

Date 3/23/2007

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires: November 30, 2000

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an**  
**abandoned well. Use Form 3160-3 (APD) for such proposals.**

1. Type of Well

☐

Oil Well

☒

Gas Well

☐

Other

2. Name of Operator

Dominion Exploration & Production, Inc.

3a. Address

14000 Quail Springs Pkwy, Ste 600, OKC, OK 73134

3b. Phone No. (include area code)

(405) 749-5237

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SHL: 1214' FSL & 356' FWL, SW SW, Sec. 33-10S-20E

BHL: 700' FSL & 800' FWL, SW SW, Sec. 33-10S-20E

5. Lease Serial No.

U-28203

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

Hill Creek Unit

8. Well Name and No.

HCU 13-33F

9. API Well No.

43-047-36685

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Natural Buttes

11. County or Parish, State

Uintah, UT

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	First Sales
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13 Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

3/22/07 - Perf & Frac

3/30/07 - First Sales

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Barbara Lester

Title Regulatory Specialist

Signature



Date 4/16/2007

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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Expires November 30, 2000

5. Lease Serial No

U-28203

6. If Indian, Allottee or Tribe Name

7.	Unit or CA Agreement Name and No
----	----------------------------------

Hill Creek Unit

8. Lease Name and Well No. HCU 13-33F

3a. Phone No. (include area code)

9. API Well No. 43-047-36685

4. Location of Well (Report location clearly and in accordance with Federal requirements)\*

At surface 1214' FSL & 356' FWL, SW SW

At top prod. Interval reported below

At total depth ~~700' FSL & 800' FWL, SW SW~~

DIV. OF OIL, GAS & MINING

10. Field and Pool, or Exploratory  
Natural Buttes

11. Sec., T., R., M., or Block and Survey or Area	33-10S-20E
--	------------

12. County or Parish Uintah	13. State UT
--------------------------------	-----------------

17. Elevations (DF, RKB, RT, GL)\*

GL 5322'

14. Date Spudded  
07/25/2006

15. Date T.D. Reached	3/10/2007
-----------------------	-----------

16. Date Completed ☐ D&A ☒ Ready to prod. 3/30/2007

18. Total Depth:	MD	8275'
	TVD	8148'

19. Plug Back T.D.:	MD	8161
	TVD	907

20. Depth Bridge Plug Set:	MD
	TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)  
Platform Express, High Resolution Laterolog Array  
Gamma Ray, Cement Bond Log

22. Was well cored? ☒ No ☐ Yes (Submit analysis)  
Was DST run? ☒ No ☐ Yes (Submit report)  
Directional Survey? ☐ No ☒ Yes (Submit copy)

23. Casing and Liner Record (Report all string set in well)

Hole Size	Size/Grade	Wt (#/ft)	Top (MD)	Bottom (MD)	Stage Cement Depth	No. of Sks & Type of Cement	Slurry Vol (BBL)	Cement Top*	Amount Pulled
17 1/2"	13 3/8"	48#	Surface	522'		500 Sx		Circ.	
12 1/4"	9 5/8"	36#	Surface	2,821'		650 Sx		Circ.	
7 7/8"	5 1/2"	17#	Surface	8,243'		725 Sx		Est. CBL 2350'	

## 24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set(MD)	Packer Depth (MD)
2 3/8"	7877'							

## 25. Producing Intervals

Formation		Top	Bottom	20. Perforation Record	Size	No. Holes	Perf Status
A)							
B)							
C)	See Attachment			See Attachment			
D)							
E)							

27. Acid Fracture Treatment, Cement Squeeze Etc.

Depth Interval	Amount and Type of Material
	See Attachment

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr API	Gas Gravity	Production Method
3/30/2007	4/18/2007	24	→	0	379	0			Flowing
Choke Size	Tbg Press Flwg SI	Csg Press	24 Hr Rate	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status	
48	205	556	→	0	379	0			Producing

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr API	Gas Gravity	Production Method
Choke Size	Tbq Press Flwg SI	Csg Press	24 Hr Rate →	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status	

(See instructions and spaces for additional data on reverse side)

28b Production - Interval C									
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr API	Gas Gravity	Production Method
			→						
Choke Size	Tbg Press Flwg SI	Csg Press	24 Hr Rate	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status	
			→						

28c Production - Interval D									
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr API	Gas Gravity	Production Method
			→						
Choke Size	Tbg Press Flwg SI	Csg Press	24 Hr Rate	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status	
			→						

29. Disposition of Gas (Sold, used for fuel, vented, etc.)

Sold

30. Summary of Porous Zones (Include Aquifers):				31. Formation (Log) Markers	
Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.					
Formation	Top	Bottom	Description, Contents, etc	Name	Top Meas. Depth
				Wasatch Tongue	3862'
				Uteland Limestone	4190'
				Wasatach	4353'
				Chapita Wells	5114'
				Uteland Buttes	6404'
				Mesaverde	7211'

32. Additional remarks (include plugging procedure)

33. Circle enclosed attachments:

- ☒ 1. Electrical/Mechanical Logs (1 full set req'd)     
 2. Geologic Report     
 3. DST Report     
 4. Directional Survey  
 5. Sundry Notice for plugging and cement verification     
 6. Core Analysis     
 7. Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)\*

Name (please print) Carla Christian      Title Supervisor, Regulatory Reports  
 Signature Carla Christian      Date April 25, 2007

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

## HCU 13-33F Perforation's & Frac's

**Interval #1**    Mesaverde    7876 - 80  
7884 - 90  
7935 - 38  
7952 - 56  
8004 - 11  
8072 - 74  
8078 - 83        60 holes

Frac w/101,542# 20/40 Ottawa sd., w/334.6 mscf of N2 and 740 bbls of YF12OST.

**Interval #2**    Mesaverde    7774- 78  
7788 - 00        58 holes

Frac w/44,620# 20/40 Ottawa sd., w/174.5 mscf of N2 and 464 bbls of YF12OST

**Interval #3**    Mesaverde    7681 - 85  
7690 - 06        58 holes

Frac w/60,731# 20/40 Ottawa sd., w/205 mscf of N2 and 514 bbls of YF12OST

**Interval #4**    Mesaverde    7589 - 02  
7611 - 21        55 holes

Frac w/48,964# 20/40 Ottawa sd., w/178.9 mscf of N2 and 473 bbls of YF12OST

**Interval #5**    Wasatch        6159 - 64  
6177 - 79  
6181 - 83  
6191 - 99        51 holes

Frac w/59,897# 20/40 Ottawa sd., w/166.9 mscf of N2 and 472 bbls of YF115ST



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APR 27 2007  
DIV. OF OIL, GAS & MINING

**Dominion Exploration & Production  
Natural Buttes Field  
Uintah County, Utah**

**HCU 13-33F**

**Section 33, T10S, R20E**

**FINAL WELL REPORT**



## **AS DRILLED**

Prepared for:

**HCU 13-33F**

**Dominion Exploration & Production**

on

**Section 33, T10S, R20E**

**Uintah County, Utah**



**Dominion™**

## Dominion Exploration & Production

Field: Uintah County, Utah  
Site: HCU # 13-33F  
Well: HCU 13-33F  
Wellpath: Original Hole  
Plan: Plan #2



Azimuths to True North  
Magnetic North: 11.68°

Magnetic Field  
Strength: 52739nT  
Dip Angle: 65.87°  
Date: 2/12/2007  
Model: igr2005

### FIELD DETAILS

Uintah County, Utah  
Utah - Natural Buttes  
USA

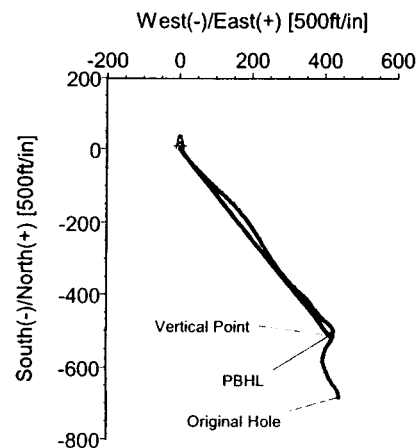
Geodetic System: US State Plane Coordinate System 1983  
Ellipsoid: GRS 1980  
Zone: Utah, Central Zone  
Magnetic Model: igr2005  
System Datum: Mean Sea Level  
Local North: True North

### SITE DETAILS

HCU # 13-33F  
Sec 33, T10S, R20E  
Uintah Co, Utah  
Site Centre Latitude: 39°53'59.030N  
Longitude: 109°40'43.220W  
Ground Level: 5322.00  
Positional Uncertainty: 0.00  
Convergence: 1.17

### WELLPATH DETAILS

Original Hole  
Rig: Ciclon 5  
Ref. Datum: Est RKB 5340.00ft  
V. Section Angle: 141.12°  
Origin +N/-S: 0.00  
Origin +E/-W: 0.00  
Starting From TVD: 0.00



### WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
HCU 13-33F	0.00	0.00	7137417.25	2151348.52	39°53'59.030N	109°40'43.220W	N/A

### TARGET DETAILS

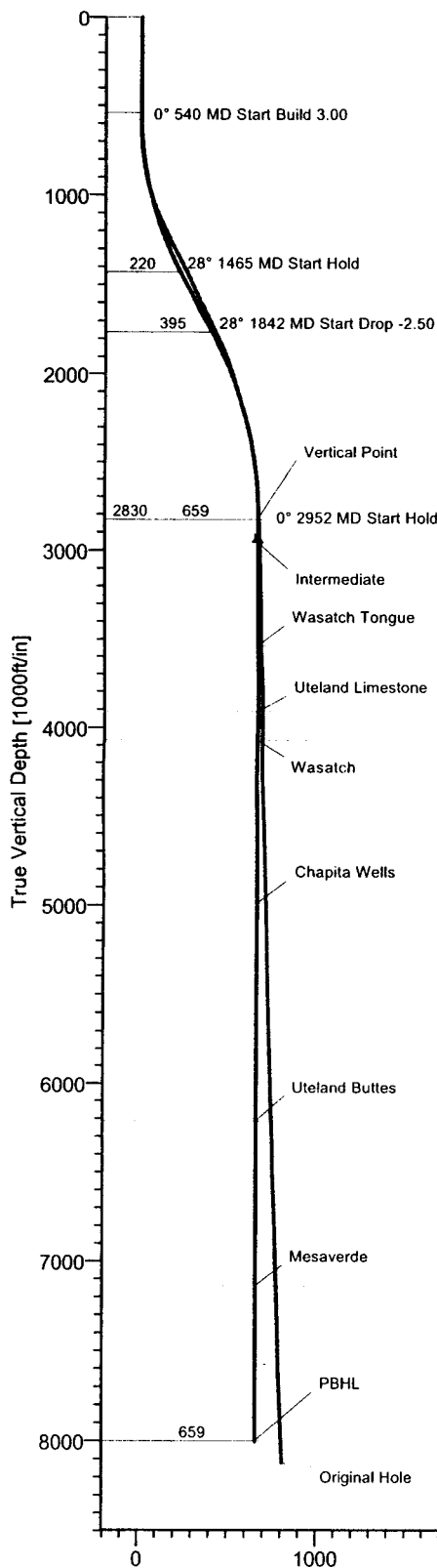
Name	TVD	+N/-S	+E/-W	Shape
Vertical Point	2830.00	-512.86	413.49	Point
PBHL	8000.00	-512.86	413.49	Point

### FORMATION TOP DETAILS

No.	TVDPATH	MDPATH	Formation
1	3540.00	3661.99	Wasatch Tongue
2	3910.00	4031.99	Uteland Limestone
3	4070.00	4191.99	Wasatch
4	4990.00	5111.99	Chapita Wells
5	6215.00	6336.99	Uteland Buttes
6	7140.00	7261.99	Mesaverde

### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	141.12	0.00	0.00	0.00	0.00	0.00	0.00	
2	540.00	0.00	141.12	540.00	0.00	0.00	0.00	141.12	0.00	
3	1465.03	27.75	141.12	1429.28	-171.01	137.88	3.00	141.12	219.67	
4	1841.96	27.75	141.12	1762.86	-307.64	248.04	0.00	0.00	395.18	
5	2951.99	0.00	141.12	2830.00	-512.86	413.49	2.50	180.00	658.79	Vertical Point
6	8121.99	0.00	141.12	8000.00	-512.86	413.49	0.00	141.12	658.79	PBHL



Vertical Section at 141.12° [1000ft/in]

Ryan Energy Technologies  
19510 Oil Center Blvd  
Houston, TX 77073  
Ph: 281-443-1414  
Fx: 281-443-1676



**Ryan** The leader in  
UNDERGROUND INTELLIGENCE™

Plan: Plan #2 (HCU 13-33F/Original Hole)  
Created By: Alexis Gonzalez Date: 3/14/2007  
Checked: Date:  
Reviewed: Date:  
Approved: Date:



# **DIRECTIONAL DRILLING COMPOSITE SURVEY REPORT**

Prepared for:

**HCU 13-33F**

**Dominion Exploration & Production**

on

**Section 33, T10S, R20E**

**Uintah County, Utah**

Report Prepared on 2007

WE HEREBY CERTIFY THAT THE DATA CONTAINED IN THIS REPORT FROM 500' FT. TO 7740' FT. BY  
OUR DIRECTIONAL SUPERVISOR, REPRESENTS TO THE BEST OF OUR KNOWLEDGE, A TRUE AND ACCURATE SURVEY  
OF THE WELL AT THE TIME THE SURVEY WAS TAKEN.

CERTIFIED BY

DATE

3-4-07





# **SURVEY REPORT - STANDARD**

Prepared for:

**HCU 13-33F**

**Dominion Exploration & Production**

on

**Section 33, T10S, R20E**

**Uintah County, Utah**



# Ryan Energy Technologies

## Survey Report



<b>Company:</b> Dominion Exploration & Product	<b>Date:</b> 3/14/2007	<b>Time:</b> 08:07:40	<b>Page:</b> 1
<b>Field:</b> Uintah County, Utah	<b>Co-ordinate(NE) Reference:</b> Well: HCU 13-33F, True North		
<b>Site:</b> HCU # 13-33F	<b>Vertical (TVD) Reference:</b> Est RKB 5340.0		
<b>Well:</b> HCU 13-33F	<b>Section (VS) Reference:</b> Well (0.00N,0.00E,141.12Azi)		
<b>Wellpath:</b> Original Hole	<b>Survey Calculation Method:</b> Minimum Curvature	<b>Db:</b> Sybase	

**Field:** Uintah County, Utah  
Utah - Natural Buttes  
USA

**Map System:** US State Plane Coordinate System 1983

**Geo Datum:** GRS 1980

**Sys Datum:** Mean Sea Level

**Map Zone:** Utah, Central Zone

**Coordinate System:** Well Centre

**Geomagnetic Model:** igrf2005

**Site:** HCU # 13-33F  
Sec 33, T10S, R20E  
Uintah Co, Utah

<b>Site Position:</b>	<b>Northing:</b> 7137417.25 ft	<b>Latitude:</b> 39 53 59.030 N
<b>From:</b> Geographic	<b>Easting:</b> 2151348.52 ft	<b>Longitude:</b> 109 40 43.220 W
<b>Position Uncertainty:</b> 0.00 ft		<b>North Reference:</b> True
<b>Ground Level:</b> 5322.00 ft		<b>Grid Convergence:</b> 1.17 deg

**Well:** HCU 13-33F

**Slot Name:**

<b>Well Position:</b>	<b>+N/-S</b> 0.00 ft	<b>Northing:</b> 7137417.25 ft	<b>Latitude:</b> 39 53 59.030 N
	<b>+E/-W</b> 0.00 ft	<b>Easting:</b> 2151348.52 ft	<b>Longitude:</b> 109 40 43.220 W
<b>Position Uncertainty:</b> 0.00 ft			

**Wellpath:** Original Hole

<b>Drilled From:</b> Surface
<b>Tie-on Depth:</b> 0.00 ft
<b>Above System Datum:</b> Mean Sea Level
<b>Declination:</b> 11.68 deg
<b>Mag Dip Angle:</b> 65.87 deg
<b>+E/-W</b> Direction deg

**Current Datum:** Est RKB **Height** 5340.00 ft

**Magnetic Data:** 2/12/2007

**Field Strength:** 52739 nT

<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>
	ft	ft

0.00	0.00	0.00	141.12
------	------	------	--------

### Survey Program for Definitive Wellpath

<b>Date:</b> 3/14/2007	<b>Validated:</b> No	<b>Version:</b> 1
<b>Actual From</b> ft	<b>To</b> ft	<b>Survey</b>
500.00	2831.00	Ryan MWD (500.00-2831.00)
3340.00	7740.00	Survey #2 (3340.00-7740.00)
8250.00	8250.00	Survey #3 (8250.00-8250.00)
		<b>Toolcode</b>
		<b>Tool Name</b>
		MWD
		SS
		Projection
		MWD
		Single-Shot
		Projection

### Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	TIE LINE
500.00	0.40	339.70	500.00	1.64	-0.61	-1.65	0.08	0.08	0.00	MWD
590.00	0.20	88.30	590.00	1.94	-0.56	-1.86	0.56	-0.22	120.67	MWD
684.00	2.60	137.90	683.96	0.36	1.04	0.37	2.63	2.55	52.77	MWD
776.00	7.00	143.20	775.62	-5.68	5.80	8.06	4.80	4.78	5.76	MWD
868.00	11.50	142.50	866.40	-17.45	14.74	22.84	4.89	4.89	-0.76	MWD
959.00	15.70	140.00	954.83	-34.09	28.18	44.23	4.66	4.62	-2.75	MWD
1053.00	20.10	136.10	1044.26	-55.48	47.57	73.05	4.85	4.68	-4.15	MWD
1149.00	24.40	133.00	1133.09	-80.90	73.52	109.13	4.64	4.48	-3.23	MWD
1245.00	26.30	131.60	1219.84	-108.55	103.93	149.74	2.08	1.98	-1.46	MWD
1340.00	27.00	134.70	1304.76	-137.69	135.00	191.92	1.64	0.74	3.26	MWD
1436.00	27.10	139.30	1390.26	-169.60	164.75	235.44	2.18	0.10	4.79	MWD
1532.00	25.40	144.90	1476.37	-203.03	190.85	277.85	3.13	-1.77	5.83	MWD
1627.00	25.10	149.10	1562.30	-236.99	212.92	318.14	1.91	-0.32	4.42	MWD
1722.00	26.10	148.80	1647.98	-272.16	234.09	358.80	1.06	1.05	-0.32	MWD
1816.00	26.60	146.00	1732.21	-307.29	256.57	400.26	1.42	0.53	-2.98	MWD
1911.00	24.30	142.10	1817.99	-340.36	280.48	441.01	2.99	-2.42	-4.11	MWD
2006.00	20.50	137.20	1905.82	-368.00	303.80	477.16	4.45	-4.00	-5.16	MWD
2103.00	18.40	132.60	1997.28	-390.83	326.61	509.25	2.68	-2.16	-4.74	MWD
2198.00	15.10	137.50	2088.24	-410.10	346.01	536.44	3.78	-3.47	5.16	MWD
2292.00	16.90	143.20	2178.60	-430.08	362.47	562.32	2.54	1.91	6.06	MWD



# Ryan Energy Technologies

## Survey Report



Company:	Dominion Exploration & Product	Date:	3/14/2007	Time:	08:07:40	Page:	2
Field:	Uintah County, Utah	Co-ordinate(NE) Reference:	Well: HCU 13-33F, True North				
Site:	HCU # 13-33F	Vertical (TVD) Reference:	Est RKB 5340.0				
Well:	HCU 13-33F	Section (VS) Reference:	Well (0.00N,0.00E,141.12Azi)				
Wellpath:	Original Hole	Survey Calculation Method:	Minimum Curvature Db: Sybase				

### Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
2387.00	16.30	140.70	2269.65	-451.45	379.19	589.45	0.98	-0.63	-2.63	MWD
2483.00	12.40	131.60	2362.64	-468.73	395.44	613.10	4.68	-4.06	-9.48	MWD
2580.00	8.50	127.70	2458.02	-480.03	408.90	630.35	4.08	-4.02	-4.02	MWD
2674.00	7.00	142.50	2551.17	-488.82	417.89	642.83	2.64	-1.60	15.74	MWD
2769.00	6.10	166.00	2645.56	-498.32	422.63	653.20	2.95	-0.95	24.74	MWD
2831.00	3.80	189.60	2707.33	-503.54	423.09	657.55	4.88	-3.71	38.06	MWD
3340.00	2.50	215.00	3215.58	-529.26	413.91	671.82	0.37	-0.26	4.99	SS
4314.00	2.00	200.00	4188.83	-562.64	395.91	686.50	0.08	-0.05	-1.54	SS
5308.00	2.00	160.00	5182.27	-595.24	395.91	711.88	0.14	0.00	-4.02	SS
6304.00	1.75	157.00	6177.74	-625.57	407.80	742.96	0.03	-0.03	-0.30	SS
7296.00	2.00	141.00	7169.21	-652.96	424.61	774.83	0.06	0.03	-1.61	SS
7740.00	2.00	160.00	7612.95	-666.27	432.14	789.91	0.15	0.00	4.28	SS
8250.00	2.00	160.00	8122.64	-682.99	438.22	806.76	0.00	0.00	0.00	PROJECTED to TD



# **SURVEY REPORT - GEOGRAPHIC**

Prepared for:

**HCU 13-33F**

**Dominion Exploration & Production**

on

**Section 33, T10S, R20E**

**Uintah County, Utah**



# Ryan Energy Technologies

## Survey Report - Geographic



<b>Company:</b> Dominion Exploration & Product		<b>Date:</b> 3/14/2007	<b>Time:</b> 08:05:26	<b>Page:</b> 1							
<b>Field:</b> Uintah County, Utah		<b>Co-ordinate(NE) Reference:</b>	<b>Well:</b> HCU 13-33F, True North								
<b>Site:</b> HCU # 13-33F		<b>Vertical (TVD) Reference:</b>	<b>Est RKB</b> 5340.0								
<b>Well:</b> HCU 13-33F		<b>Section (VS) Reference:</b>	<b>Well (0.00N,0.00E,141.12Azi)</b>								
<b>Wellpath:</b> Original Hole		<b>Survey Calculation Method:</b>	<b>Minimum Curvature</b> <b>Db:</b> Sybase								
<b>Field:</b> Uintah County, Utah Utah - Natural Buttes USA											
<b>Map System:</b> US State Plane Coordinate System 1983		<b>Map Zone:</b>	Utah, Central Zone								
<b>Geo Datum:</b> GRS 1980		<b>Coordinate System:</b>	Well Centre								
<b>Sys Datum:</b> Mean Sea Level		<b>Geomagnetic Model:</b>	igrf2005								
<b>Site:</b> HCU # 13-33F Sec 33, T10S, R20E Uintah Co, Utah											
<b>Site Position:</b>	<b>Northing:</b> 7137417.25 ft	<b>Latitude:</b>	39 53 59.030 N								
<b>From:</b> Geographic	<b>Easting:</b> 2151348.52 ft	<b>Longitude:</b>	109 40 43.220 W								
<b>Position Uncertainty:</b> 0.00 ft		<b>North Reference:</b>	True								
<b>Ground Level:</b> 5322.00 ft		<b>Grid Convergence:</b>	1.17 deg								
<b>Well:</b> HCU 13-33F <b>Slot Name:</b>											
<b>Well Position:</b>	<b>+N/-S</b> 0.00 ft	<b>Northing:</b> 7137417.25 ft	<b>Latitude:</b>	39 53 59.030 N							
	<b>+E/-W</b> 0.00 ft	<b>Easting :</b> 2151348.52 ft	<b>Longitude:</b>	109 40 43.220 W							
<b>Position Uncertainty:</b>	0.00 ft										
<b>Wellpath:</b> Original Hole											
<b>Current Datum:</b> Est RKB	<b>Height</b> 5340.00 ft	<b>Drilled From:</b>	Surface								
<b>Magnetic Data:</b> 2/12/2007		<b>Tie-on Depth:</b>	0.00 ft								
<b>Field Strength:</b> 52739 nT		<b>Above System Datum:</b>	Mean Sea Level								
<b>Vertical Section:</b> Depth From (TVD)	<b>+N/-S</b> ft	<b>Declination:</b>	11.68 deg								
		<b>Mag Dip Angle:</b>	65.87 deg								
		<b>+E/-W</b> ft	<b>Direction</b> deg								
	0.00	0.00	141.12								
<b>Survey Program for Definitive Wellpath</b>											
<b>Date:</b> 3/14/2007	<b>Validated:</b> No	<b>Version:</b> 1									
<b>Actual From</b> ft	<b>To</b> ft	<b>Survey</b>	<b>Toolcode</b>	<b>Tool Name</b>							
500.00	2831.00	Ryan MWD (500.00-2831.00)	MWD	MWD							
3340.00	7740.00	Survey #2 (3340.00-7740.00)	SS	Single-Shot							
8250.00	8250.00	Survey #3 (8250.00-8250.00)	Projection	Projection							
<b>Survey</b>											
MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	← Latitude → Deg Min Sec		← Longitude → Deg Min Sec	
0.00	0.00	0.00	0.00	0.00	0.00	7137417.25	2151348.52	39 53	59.030 N	109 40	43.220 W
500.00	0.40	339.70	500.00	1.64	-0.61	7137418.87	2151347.89	39 53	59.046 N	109 40	43.228 W
590.00	0.20	88.30	590.00	1.94	-0.56	7137419.17	2151347.93	39 53	59.049 N	109 40	43.227 W
684.00	2.60	137.90	683.96	0.36	1.04	7137417.63	2151349.55	39 53	59.034 N	109 40	43.207 W
776.00	7.00	143.20	775.62	-5.68	5.80	7137411.69	2151354.43	39 53	58.974 N	109 40	43.146 W
868.00	11.50	142.50	866.40	-17.45	14.74	7137400.10	2151363.62	39 53	58.857 N	109 40	43.031 W
959.00	15.70	140.00	954.83	-34.09	28.18	7137383.74	2151377.40	39 53	58.693 N	109 40	42.858 W
1053.00	20.10	136.10	1044.26	-55.48	47.57	7137362.75	2151397.21	39 53	58.482 N	109 40	42.610 W
1149.00	24.40	133.00	1133.09	-80.90	73.52	7137337.86	2151423.68	39 53	58.230 N	109 40	42.277 W
1245.00	26.30	131.60	1219.84	-108.55	103.93	7137310.84	2151454.64	39 53	57.957 N	109 40	41.886 W
1340.00	27.00	134.70	1304.76	-137.69	135.00	7137282.33	2151486.30	39 53	57.669 N	109 40	41.488 W
1436.00	27.10	139.30	1390.26	-169.60	164.75	7137251.04	2151516.69	39 53	57.354 N	109 40	41.106 W
1532.00	25.40	144.90	1476.37	-203.03	190.85	7137218.15	2151543.47	39 53	57.023 N	109 40	40.771 W
1627.00	25.10	149.10	1562.30	-236.99	212.92	7137184.64	2151566.22	39 53	56.688 N	109 40	40.488 W
1722.00	26.10	148.80	1647.98	-272.16	234.09	7137149.91	2151588.11	39 53	56.340 N	109 40	40.216 W
1816.00	26.60	146.00	1732.21	-307.29	256.57	7137115.24	2151611.30	39 53	55.993 N	109 40	39.928 W
1911.00	24.30	142.10	1817.99	-340.36	280.48	7137082.67	2151635.87	39 53	55.666 N	109 40	39.621 W
2006.00	20.50	137.20	1905.82	-368.00	303.80	7137055.51	2151659.75	39 53	55.393 N	109 40	39.322 W
2103.00	18.40	132.60	1997.28	-390.83	326.61	7137033.15	2151683.03	39 53	55.167 N	109 40	39.029 W
2198.00	15.10	137.50	2088.24	-410.10	346.01	7137014.27	2151702.82	39 53	54.977 N	109 40	38.780 W



# Ryan Energy Technologies

## Survey Report - Geographic



Company: Dominion Exploration & Product  
Field: Uintah County, Utah  
Site: HCU # 13-33F  
Well: HCU 13-33F  
Wellpath: Original Hole

Date: 3/14/2007 Time: 08:05:26 Page: 2  
Co-ordinate(NE) Reference: Well: HCU 13-33F, True North  
Vertical (TVD) Reference: Est RKB 5340.0  
Section (VS) Reference: Well (0.00N,0.00E,141.12Azi)  
Survey Calculation Method: Minimum Curvature Db: Sybase

### Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	← Latitude →			← Longitude →		
								Deg	Min	Sec	Deg	Min	Sec
2292.00	16.90	143.20	2178.60	-430.08	362.47	7136994.64	2151719.68	39	53	54.779 N	109	40	38.569 W
2387.00	16.30	140.70	2269.65	-451.45	379.19	7136973.61	2151736.83	39	53	54.568 N	109	40	38.354 W
2483.00	12.40	131.60	2362.64	-468.73	395.44	7136956.67	2151753.42	39	53	54.397 N	109	40	38.146 W
2580.00	8.50	127.70	2458.02	-480.03	408.90	7136945.64	2151767.12	39	53	54.286 N	109	40	37.973 W
2674.00	7.00	142.50	2551.17	-488.82	417.89	7136937.04	2151776.28	39	53	54.199 N	109	40	37.858 W
2769.00	6.10	166.00	2645.56	-498.32	422.63	7136927.64	2151781.22	39	53	54.105 N	109	40	37.797 W
2831.00	3.80	189.60	2707.33	-503.54	423.09	7136922.43	2151781.78	39	53	54.053 N	109	40	37.791 W
3340.00	2.50	215.00	3215.58	-529.26	413.91	7136896.52	2151773.12	39	53	53.799 N	109	40	37.909 W
4314.00	2.00	200.00	4188.83	-562.64	395.91	7136862.79	2151755.81	39	53	53.469 N	109	40	38.140 W
5308.00	2.00	160.00	5182.27	-595.24	395.91	7136830.20	2151756.47	39	53	53.147 N	109	40	38.140 W
6304.00	1.75	157.00	6177.74	-625.57	407.80	7136800.11	2151768.97	39	53	52.847 N	109	40	37.987 W
7296.00	2.00	141.00	7169.21	-652.96	424.61	7136773.07	2151786.34	39	53	52.576 N	109	40	37.771 W
7740.00	2.00	160.00	7612.95	-666.27	432.14	7136759.92	2151794.14	39	53	52.445 N	109	40	37.675 W
8250.00	2.00	160.00	8122.64	-682.99	438.22	7136743.32	2151800.56	39	53	52.280 N	109	40	37.597 W

Division of Oil, Gas and Mining  
**OPERATOR CHANGE WORKSHEET**

**ROUTING**

1. DJJ

2. CDW

**X - Change of Operator (Well Sold)**

Operator Name Change/Merger

The operator of the well(s) listed below has changed, effective:

**7/1/2007**

**FROM: (Old Operator):**

N1095-Dominion Exploration & Production, Inc  
 14000 Quail Springs Parkway, Suite 600  
 Oklahoma City, OK 73134

Phone: 1 (405) 749-1300

**TO: ( New Operator):**

N2615-XTO Energy Inc  
 810 Houston St  
 Fort Worth, TX 76102

Phone: 1 (817) 870-2800

**CA No.**

**Unit:**

**HILL CREEK**

WELL NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
SEE ATTACHED LIST								

**OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 8/6/2007
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 8/6/2007
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 8/6/2007
- a. Is the new operator registered in the State of Utah: Business Number: 5655506-0143
- b. If **NO**, the operator was contacted on: \_\_\_\_\_
- a. (R649-9-2) Waste Management Plan has been received on: IN PLACE
- b. Inspections of LA PA state/fee well sites complete on: n/a
- c. Reports current for Production/Disposition & Sundries on: ok
- Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM BIA
- Federal and Indian Units:**  
The BLM or BIA has approved the successor of unit operator for wells listed on: \_\_\_\_\_
- Federal and Indian Communization Agreements ("CA"):**  
The BLM or BIA has approved the operator for all wells listed within a CA on: \_\_\_\_\_
- Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: \_\_\_\_\_

**DATA ENTRY:**

- Changes entered in the **Oil and Gas Database** on: 9/27/2007
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 9/27/2007
- Bond information entered in RBDMS on: 9/27/2007
- Fee/State wells attached to bond in RBDMS on: 9/27/2007
- Injection Projects to new operator in RBDMS on: 9/27/2007
- Receipt of Acceptance of Drilling Procedures for APD/New on: 9/27/2007

**BOND VERIFICATION:**

- Federal well(s) covered by Bond Number: UTB000138
- Indian well(s) covered by Bond Number: n/a
- a. (R649-3-1) The **NEW** operator of any state/fee well(s) listed covered by Bond Number 104312762
- b. The **FORMER** operator has requested a release of liability from their bond on: 1/23/2008

The Division sent response by letter on: \_\_\_\_\_

**LEASE INTEREST OWNER NOTIFICATION:**

- (R649-2-10) The **NEW** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: \_\_\_\_\_

**COMMENTS:**

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER:
2. NAME OF OPERATOR: XTO Energy Inc. <i>N 2615</i>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: 810 Houston Street CITY Fort Worth STATE TX ZIP 76102		7. UNIT or CA AGREEMENT NAME:
4. LOCATION OF WELL FOOTAGES AT SURFACE: SEE ATTACHED		8. WELL NAME and NUMBER: SEE ATTACHED
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:		9. API NUMBER: SEE ATTACHED
COUNTY: Uintah		10. FIELD AND POOL, OR WILDCAT: Natural Buttes
STATE: UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
Effective July 1, 2007, XTO Energy Inc. has purchased the wells listed on the attachment from:

Dominion Exploration & Production, Inc.  
14000 Quail Springs Parkway, Suite 600  
Oklahoma City, OK 73134

*N 1095*

*James D. Abercrombie*  
James D. Abercrombie  
Sr. Vice President, General Manager - Western Business Unit  
*(405) 749-1300*

Please be advised that XTO Energy Inc. is considered to be the operator on the attached list and is responsible under the terms and conditions of the lease for the operations conducted upon the lease lands. Bond coverage is provided by Nationwide BLM Bond #104312750 and Department of Natural Resources Bond #104312762.

NAME (PLEASE PRINT) <u>Edwin S. Ryan, Jr.</u>	TITLE <u>Sr. Vice President - Land Administration</u>
SIGNATURE <i>Edwin S. Ryan, Jr.</i>	DATE <u>7/31/2007</u>

(This space for State use only)

APPROVED 9127107  
*Earlene Russell*  
Division of Oil, Gas and Mining  
Earlene Russell, Engineering Technician

(See Instructions on Reverse Side)

RECEIVED  
AUG 06 2007  
DIV. OF OIL, GAS & MINING

(5/2000)



N1095 DOMINION E and P, INC. to N2615 XTO ENERGY, INC.

api	well_name	qtr_qtr	sec	tpw	rng	lease_num	entity	Lease	well	stat
4304731522	FEDERAL 1-29	SWNW	29	100S	200E	U-28203	12829	Federal	GW	P
4304731601	HILLCREEK FED 1-30	NWSW	30	100S	200E	U-30693	12829	Federal	GW	P
4304731675	HILL CREEK FED 1-27	SEnw	27	100S	200E	U-29784	12829	Federal	GW	P
4304733671	HCU 1-28F	NENE	28	100S	200E	14-20-H62-4783	12829	Indian	GW	S
4304733672	HCU 1-29F	NENE	29	100S	200E	U-28203	12829	Federal	GW	P
4304733673	HCU 2-30F	NWNE	30	100S	200E	UTU-29784	12829	Federal	GW	P
4304733688	HCU 3-28F	NENW	28	100S	200E	U-28203	12829	Federal	GW	P
4304733689	HCU 3-29F	NENW	29	100S	200E	U-28203	12829	Federal	GW	P
4304733713	HCU 3-30F	NWNW	30	100S	200E	UTU-30693	12829	Federal	GW	P
4304733835	HCU 5-30F	SWNW	30	100S	200E	U-30693	12829	Federal	GW	P
4304733836	HCU 6-30F	SEnw	30	100S	200E	U-30693	12829	Federal	GW	P
4304733964	HCU 8-30F	SENE	30	100S	200E	UTU-29784	12829	Federal	GW	P
4304733965	HCU 11-30F	NESW	30	100S	200E	U-30693	12829	Federal	GW	P
4304733966	HCU 13-30F	SWSW	30	100S	200E	U-30693	12829	Federal	GW	P
4304734045	HCU 5-28F	SWNW	28	100S	200E	U-28203	12829	Federal	GW	P
4304734046	HCU 7-29F	SWNE	29	100S	200E	U-28203	12829	Federal	GW	P
4304734223	HCU 9-29F	NESE	29	100S	200E	U-28203	12829	Federal	GW	P
4304734298	HCU 3-31F	NWNW	31	100S	200E	UTU-30693	12829	Federal	GW	P
4304734299	HCU 5-31F	SWNW	31	100S	200E	UTU-30693	12829	Federal	GW	P
4304734300	HCU 7-31F	SEnw	31	100S	200E	UTU-30693	12829	Federal	GW	P
4304734316	HCU 2-27F	NWNE	27	100S	200E	UTU-79130	12829	Federal	GW	P
4304734351	HCU 8-27F	SENE	27	100S	200E	UTU-79130	12829	Federal	GW	P
4304734352	HCU 11-31F	NWSW	31	100S	200E	UTU-30693	12829	Federal	GW	P
4304734353	HCU 13-31F	SWSW	31	100S	200E	UTU-30693	12829	Federal	GW	P
4304734853	HCU 1-33F	NENE	33	100S	200E	14-20-H62-4782	12829	Indian	GW	P
4304734854	HCU 3-34F	NENW	34	100S	200E	U-28203	12829	Federal	GW	P
4304734913	HCU 1-27F	NENE	27	100S	200E	U-79130	12829	Federal	GW	P
4304734914	HCU 3-27F	NENW	27	100S	200E	U-79130	12829	Federal	GW	P
4304734915	HCU 7-27F	SWNE	27	100S	200E	U-79130	12829	Federal	GW	S
4304734916	HCU 10-27F	NWSE	27	100S	200E	U-79130	12829	Federal	GW	P
4304734917	HCU 14-30F	SWSW	30	100S	200E	U-30693	12829	Federal	GW	P
4304734918	HCU 15-30F	SWSE	30	100S	200E	U-29784	12829	Federal	GW	P
4304734919	HCU 2-31F	NWNE	31	100S	200E	U-30693	12829	Federal	GW	P
4304734920	HCU 6-31F	SWNW	31	100S	200E	U-30693	12829	Federal	GW	P
4304734921	HCU 4-31F	NWNW	31	100S	200E	U-30693	12829	Federal	GW	P
4304735130	HCU 11-27F	NESW	27	100S	200E	U-29784	12829	Federal	GW	P
4304735131	HCU 2-29F	NWNE	29	100S	200E	U-28203	12829	Federal	GW	P
4304735132	HCU 9-30F	NESE	30	100S	200E	U-29784	12829	Federal	GW	P
4304735133	HCU 10-30F	NWSE	30	100S	200E	U-29784	12829	Federal	GW	P
4304735134	HCU 1-31F	NENE	31	100S	200E	U-36903	12829	Federal	GW	P
4304735135	HCU 12-31F	NWSW	31	100S	200E	U-30693	12829	Federal	GW	P
4304735137	HCU 2-33F	NENE	33	100S	200E	U-28203	12829	Federal	GW	P
4304735139	HCU 5-34F	NENW	34	100S	200E	U-28203	12829	Federal	GW	P
4304735154	HCU 13-27F	NESW	27	100S	200E	U-29784	12829	Federal	GW	P
4304735230	HCU 8-33F	SENE	33	100S	200E	14-20-H62-4782	12829	Indian	GW	P
4304735307	HCU 6-29F	SEnw	29	100S	200E	U-28203	12829	Federal	GW	P
4304735470	HCU 11-29F	NESW	29	100S	200E	U-28203	12829	Federal	GW	P
4304735471	HCU 10-29F	NWSE	29	100S	200E	U-28203	12829	Federal	GW	P

N1095 DOMINION E and P, INC. to N2615 XTO ENERGY, INC.

api	well_name	qtr_qtr	sec	tpw	rng	lease_num	entity	Lease	well	stat
4304735507	HCU 12-29FA	NESW	29	100S	200E	U-28203	12829	Federal	GW	DRL
4304735724	HCU 16-27F	SESE	27	100S	200E	U-79130	12829	Federal	GW	P
4304735725	HCU 9-27F	NESE	27	100S	200E	U-79130	12829	Federal	GW	P
4304735726	HCU 15-27F	SWSE	27	100S	200E	U-79130	12829	Federal	GW	P
4304735727	HCU 9-34F	NESE	34	100S	200E	U-79130	12829	Federal	GW	P
4304735728	HCU 7-34F	SWNE	34	100S	200E	U-79130	12829	Federal	GW	P
4304735832	HCU 9-33F	NESE	33	100S	200E	U-28203	12829	Federal	GW	P
4304735833	HCU 16-33F	SESE	33	100S	200E	U-28203	12829	Federal	GW	P
4304735835	HCU 11-34F	NESW	34	100S	200E	U-28203	12829	Federal	GW	P
4304735836	HCU 12-34F	NWSW	34	100S	200E	U-28203	12829	Federal	GW	P
4304735837	HCU 13-34F	SWSW	34	100S	200E	U-28203	12829	Federal	GW	P
4304735838	HCU 15-34F	SWSE	34	100S	200E	U-79130	12829	Federal	GW	P
4304735875	HCU 14-34F	SWSE	34	100S	200E	U-79130	12829	Federal	GW	P
4304735934	HCU 8-31F	SENE	31	100S	200E	U-30693	12829	Federal	GW	P
4304735935	HCU 10-31F	NWSE	31	100S	200E	U-30693	12829	Federal	GW	P
4304735936	HCU 9-31F	NWSE	31	100S	200E	U-30693	12829	Federal	GW	P
4304735939	HCU 16-28F	SESE	28	100S	200E	U-28203	12829	Federal	GW	P
4304735940	HCU 6-34F	SENE	34	100S	200E	U-28203	12829	Federal	GW	P
4304735996	HCU 16-34F	SESE	34	100S	200E	U-79130	12829	Federal	GW	P
4304736046	HCU 14-31F	SWSW	31	100S	200E	U-30693	12829	Federal	GW	P
4304736251	HCU 16-30F	NESE	30	100S	200E	U-29784	12829	Federal	GW	P
4304736319	HCU 10-28F	NWSE	28	100S	200E	U-28203	12829	Federal	GW	P
4304736320	HCU 13-28F	SWSW	28	100S	200E	U-28203	12829	Federal	GW	P
4304736321	HCU 14-28F	SESW	28	100S	200E	U-28203	12829	Federal	GW	P
4304736437	HCU 5-27F	SWNW	27	100S	200E	U-29784	12829	Federal	GW	DRL
4304736438	HCU 4-27F	SWNW	27	100S	200E	U-29784	12829	Federal	GW	DRL
4304736439	HCU 11-28F	NESW	28	100S	200E	U-28203	12829	Federal	GW	P
4304736440	HCU 5-30F2	SWNW	30	100S	200E	U-30693	12829	Federal	GW	DRL
4304736601	HCU 5-33F	SWNW	33	100S	200E	U-28203	12829	Federal	GW	P
4304736602	HCU 12-33F	NWSW	33	100S	200E	U-28203	12829	Federal	GW	P
4304736603	HCU 6-28F	SENE	28	100S	200E	U-28203	12829	Federal	GW	S
4304736604	HCU 12-28F	NWSW	28	100S	200E	U-28203	12829	Federal	GW	P
4304736685	HCU 13-33F	SWSW	33	100S	200E	U-28203	12829	Federal	GW	P
4304736846	HCU 9-28F	NESE	28	100S	200E	14-20-H62-4781	12829	Indian	GW	P
4304736847	HCU 8-28F	SENE	28	100S	200E	14-20-H62-4783	12829	Indian	GW	P
4304736848	HCU 7-28F	SWNE	28	100S	200E	U-28203	12829	Federal	GW	P
4304736849	HCU 1-34F	NENE	34	100S	200E	U-79130	12829	Federal	GW	P
4304736852	HCU 14-27F	NESW	27	100S	200E	U-29784	12829	Federal	GW	DRL
4304736853	HCU 16-29F	SESE	29	100S	200E	U-28203	12829	Federal	GW	P
4304737060	HCU 4-33F	NWNW	33	100S	200E	U-28203	12829	Federal	GW	P
4304737202	HCU 6-33F	SENE	33	100S	200E	U-28203	12829	Federal	GW	P
4304737203	HCU 3-33F	NWNE	33	100S	200E	U-28203	12829	Federal	OW	P
4304737204	HCU 15-28F	NWNE	33	100S	200E	14-20-H62-4781	12829	Indian	OW	P
4304737284	HCU 7-30F	SENE	30	100S	200E	U-29784	99999	Federal	OW	DRL
4304737340	HCU 5-29F	SWNW	29	100S	200E	U-28203	12829	Federal	GW	P
4304737360	HCU 11-33F	NWSW	33	100S	200E	U-28203	12829	Federal	GW	P
4304737424	HCU 12-27F	NESW	27	100S	200E	U-29784	12829	Federal	OW	DRL
4304737425	HCU 14-29F	SWSW	29	100S	200E	U-28203	12829	Federal	GW	P

N1095 DOMINION E and P, INC. to N2615 XTO ENERGY, INC.

api	well_name	qtr_qtr	sec	twp	rng	lease_num	entity	Lease	well	stat
4304737426	HCU 13-29F	SWSW	29	100S	200E	U-28203	12829	Federal	GW	P
4304737427	HCU 8-29F	NESE	29	100S	200E	U-28203	12829	Federal	GW	P
4304737445	HCU 8-34F	SENE	34	100S	200E	U-79130	12829	Federal	OW	S
4304737446	HCU 2-34F	NWNE	34	100S	200E	U-79130	12829	Federal	OW	DRL
4304737447	HCU 7-33F	SENE	33	100S	200E	U-28203	12829	Federal	OW	DRL
4304737570	HCU 10-33F	NWSE	33	100S	200E	14-20-H62-4782	12829	Indian	GW	P
4304737749	HCU 4-28F	NENW	28	100S	200E	U-28203	99999	Federal	GW	DRL
4304737750	HCU 14-33F	SWSE	33	100S	200E	U-028203	12829	Federal	GW	DRL
4304731560	HILL CREEK ST 1-32	SENE	32	100S	200E	ML-22313	12829	State	GW	P
4304734852	HCU 4-32F	NWNW	32	100S	200E	ML-22313-2	12829	State	GW	P
4304735136	HCU 5-32F	SWNW	32	100S	200E	ML-22313-2	12829	State	GW	P
4304735870	HCU 13-32F	NESE	31	100S	200E	ML-22313-2		State	GW	LA
4304735871	HCU 12-32F	NESE	31	100S	200E	ML-22313-2		State	GW	LA
4304735872	HCU 14-32F	SESW	32	100S	200E	ML-22313-2	12829	State	GW	P
4304735873	HCU 3-32F	NENW	32	100S	200E	ML-22313-2	12829	State	GW	DRL
4304735874	HCU 11-32F	SENE	32	100S	200E	ML-22313-2	12829	State	D	PA
4304736322	HCU 16-32F	SESE	32	100S	200E	ML-22313-2	12829	State	GW	P
4304736323	HCU 9-32F	NESE	32	100S	200E	ML-22313-2	12829	State	GW	P
4304736324	HCU 8-32F	SENE	32	100S	200E	ML-22313-2	12829	State	GW	P
4304736441	HCU 1-32F2	NENE	32	100S	200E	ML-22313-2	12829	State	GW	P
4304736684	HCU 7-32F	SENE	32	100S	200E	ML-22313-2	12829	State	GW	P



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, UT 84145-0155



IN REPLY REFER TO  
3180  
UT-922

Dominion Exploration & Production, Inc.  
Attn: James D. Abercrombie  
14000 Quail Springs Parkway, #600  
Oklahoma City, OK 73134-2600

August 10, 2007

Re: Hill Creek Unit  
Uintah County, Utah

Gentlemen:

On August 8, 2007, we received an indenture dated June 30, 2007, whereby Dominion Exploration & Production, Inc. resigned as Unit Operator and XTO Energy Inc. was designated as Successor Unit Operator for the Hill Creek Unit, Uintah County, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective August 15, 2007. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Hill Creek Unit Agreement.

Your statewide oil and gas Bond No. UTB000138 will be used to cover all operations within the River Bend Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Greg J. Noble

Greg J. Noble  
Acting Chief, Branch of Fluid Minerals

Enclosure

RECEIVED

AUG 16 2007

DIV. OF OIL, GAS & MINING

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> U-28203
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> XTO ENERGY INC		<b>7. UNIT or CA AGREEMENT NAME:</b> HILL CREEK
<b>3. ADDRESS OF OPERATOR:</b> 382 Road 3100 , Aztec, NM, 87410		<b>8. WELL NAME and NUMBER:</b> HCU 13-33F
<b>PHONE NUMBER:</b> 505 333-3159 Ext		<b>9. API NUMBER:</b> 43047366850000
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1214 FSL 0356 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWSW Section: 33 Township: 10.0S Range: 20.0E Meridian: S		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
		<b>COUNTY:</b> UTAH
		<b>STATE:</b> UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input checked="" type="checkbox"/> <b>ACIDIZE</b>  <input type="checkbox"/> <b>CHANGE TO PREVIOUS PLANS</b>  <input type="checkbox"/> <b>CHANGE WELL STATUS</b>  <input type="checkbox"/> <b>DEEPEN</b>  <input type="checkbox"/> <b>OPERATOR CHANGE</b>  <input type="checkbox"/> <b>PRODUCTION START OR RESUME</b>  <input type="checkbox"/> <b>REPERFORATE CURRENT FORMATION</b>  <input type="checkbox"/> <b>TUBING REPAIR</b>  <input type="checkbox"/> <b>WATER SHUTOFF</b>  <input type="checkbox"/> <b>WILDCAT WELL DETERMINATION</b>	<input type="checkbox"/> <b>ALTER CASING</b>  <input type="checkbox"/> <b>CHANGE TUBING</b>  <input type="checkbox"/> <b>COMMINGLE PRODUCING FORMATIONS</b>  <input type="checkbox"/> <b>FRACTURE TREAT</b>  <input type="checkbox"/> <b>PLUG AND ABANDON</b>  <input type="checkbox"/> <b>RECLAMATION OF WELL SITE</b>  <input type="checkbox"/> <b>SIDETRACK TO REPAIR WELL</b>  <input type="checkbox"/> <b>VENT OR FLARE</b>  <input type="checkbox"/> <b>SI TA STATUS EXTENSION</b>	<input type="checkbox"/> <b>CASING REPAIR</b>  <input type="checkbox"/> <b>CHANGE WELL NAME</b>  <input type="checkbox"/> <b>CONVERT WELL TYPE</b>  <input type="checkbox"/> <b>NEW CONSTRUCTION</b>  <input type="checkbox"/> <b>PLUG BACK</b>  <input type="checkbox"/> <b>RECOMPLETE DIFFERENT FORMATION</b>  <input type="checkbox"/> <b>TEMPORARY ABANDON</b>  <input type="checkbox"/> <b>WATER DISPOSAL</b>  <input type="checkbox"/> <b>APD EXTENSION</b>  OTHER: <input style="width: 100px;" type="text" value="CLEAN OUT"/>
<input checked="" type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion: 9/17/2010			
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:			
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
 XTO Energy Inc. has cleaned out & performed acid treatments on this well per the attached summary report.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 October 07, 2010

<b>NAME (PLEASE PRINT)</b> Barbara Nicol	<b>PHONE NUMBER</b> 505 333-3642	<b>TITLE</b> Regulatory Compliance Tech
<b>SIGNATURE</b> N/A	<b>DATE</b> 10/1/2010	

## **Hill Creek Unit 13-33F**

**9/8/2010:** MIRU 4CWS #5. Bd well. ND WH. NU BOP. PU & TIH w/9 jts 2-3/8" tbg. Tgd 26' of fill @ 8,159' (BRS @ 8,185'). TOH & LD 9 jts tbg. Contd to TOH w/ prod tbg strg as follows: 252 jts 2-3/8", N-80, 4.7#, EUE 8rd tbg, 2-3/8" SN & BRs ( top sec). Plngr recd by pmpr. Recd BHBS in SN covered in 2' of fn solids. Found med sc BU on ext of tbg fr/6,252'- 6,376' & hvy sc BU fr/7,685'- 7,715'. Smpl sent in for anal. TIH w/4-3/4" bit, 5-1/2" csg scr & 132 jts 2-3/8" tbg. EOT @ 4134'. SWI & SDFN.

**9/9/2010:** Bd well. Contd to TIH w/4-3/4" bit, 5-1/2" csg scr & 2-3/8" tbg. Tgd fill @ 8,159'. MIRU pwr swivel & AFU. Attd to estb circion w/AFU. SD for 2 hrs to rep AFU. Estb circion. CO 6' of fill to 8,166'. DO @ 8,166' for 1 hr w/no add hole made ( poss BRS). Circ cln for 2 hrs & KW w/20 bbls 2% KCl wtr. RDMO AFU & pwr swivel. TOH w/173 jts tbg. EOT @ 2763'. SWI & SDFN.

**9/10/2010:** Bd well. TOH w/88 jts 2-3/8" tbg. LD bit & csg scr. TIH w/5-1/2" RBP, 5-1/2" pkr & 261 jts tbg. KW w/10 BW as per TIH. Set RBP @ 8,150' & pkr @ 8,125'. PT tbg & tls to 3000 psig w/25 BW, 5", gd tst. Rlsd pkr & TOH w/9 jts tbg. SWI & SDFN.

**9/13/2010:** Bd well. Set pkr @ 7,833'. MIRU Frac-Tech. PT surf equip to 5000 psig. Proceed w/5 stage A. trtmnt as follows: Stg #1. Isol MV perfs fr/7,876' - 8,083'. Trtd perfs w/724 gals 15% HCL ac w/adds mutual solv, iron seq & corr inhib. Flshd w/33 bbls trtd wtr. Max trtg press 2,890 psig @ 3.9 BPM. ISIP 1730 psig. 5" SIP 0 psig. Stg #2. Isol MV perfs fr/7,774' - 7,800'. Trtd perfs w/374 gals 15% HCL ac w/adds mutual solv, iron seq & corr inhib. Flshd w/33 bbls trtd wtr. Max trtg press 3,392 psig @ 1.7 BPM. ISIP 3,096 psig. 5" SIP 0 psig. Stg #3. Isol MV perfs fr/7,681' - 7,706'. Trtd perfs w/467 gals 15% HCL ac w/adds mutual solv, iron seq & corr inhib. Flshd w/33 bbls trtd wtr. Max trtg press 3,414 psig @ 2.3 BPM. ISIP 2,367 psig. 5" SIP 0 psig. #4. Isol MV perfs fr/7,589' - 7,621'. Trtd perfs w/537 gals 15% HCL ac w/adds mutual solv, iron seq & corr inhib. Flshd w/32 bbls trtd wtr. Max trtg press 3,200 psig @ 3.4 BPM. ISIP 2,299 psig. 5" SIP 0 psig. #5. Isol WA perfs fr/6,159' - 6,199'. Trtd perfs w/397 gals 15% HCL ac w/adds mutual solv, iron seq & corr inhib. Flshd w/27 bbls trtd wtr. Max trtg press 1,524 psig @ 5 BPM. ISIP 0 psig. 5" SIP 0 psig. RDMO Frac-Tech. Rlsd tls. TOH w/tbg. LD RBP & pkr. TIH w/prod tbg strg & Ld on hgr as follows: 256 jts 2-3/8", N-80, 4.7#, EUE 8rd tbg, 2-3/8" SN & mule shoe col. SN @ 8,006', EOT @ 8,007', WA/MV perfs fr/6,159'- 8,083', fill 8,166' & PBTD @ 8,275'. SWI & SDFN.

**9/14/2010:** Bd well. MIRU B&C tstrs. PT BOP & TIW vlvs to 5000 psig, gd tst. RDMO tstrs. RU swb tls. RIH w/XTO's 1.90" tbg broach to SN, no ti spts. POH & LD broach. ND BOP. NU WH. RU & RIH w/ swb tls. BFL @ 5,700' FS. S. 0 BO, 40 BLW, fld smpls of gray wtr w/lt sediment, 12 runs, 4.5 hrs. PH @ 1. FFL @ 5,700' FS. RD swb tls. Lt blow on tbg. SICP 210 psig. SWIFBU & SDFN.

**9/15/2010:** Bd tbg /no fld recy. RU & RIH w/swb tls. BFL @ 5,500' FS. S. 0 BO, 53 BLW, fld smpls of gray wtr w/fn sediment, 10 runs, 4 hrs. PH @ 6. FFL @ 5,500' FS. KO well flwg. RD swb tls. F. 0 BO, 3 BLW, 1 hr. FTP 30 psig on 1" ck. SICP 425 psig. Drpd BHBS w/SV & SWI for 30". Drpd plngr. Well did not cycle due to line press. Turn well over to prod. RDMO 4CWS #5.

**9/16/2010:** MIRU Tech Swabbing SWU. Bd Tbg. RU & RIH w/swb tls. SN @ 8,006'. BFL @ 6,000' FS. S. 0 BO, 30 BW, 9 runs, 11 hrs. FFL @ 6,800' FS. FTP 0 psig. SICP 600 psig. SDFN Tech Swabbing SWU.

**9/17/2010:** MIRU Tech Swabbing SWU. Bd Tbg. RU & RIH w/swb tls. SN @ 8,006'. BFL @ 6,000' FS. S. 0 BO, 33 BW, 10 runs, 13 hrs. FFL @ 6,000' FS. FTP 0 psig. SICP 450 psig. SDFN Tech Swabbing SWU.

=====Hill Creek Unit 13-33F=====

**End of Report**

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> U-28203
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> XTO ENERGY INC		<b>7. UNIT or CA AGREEMENT NAME:</b> HILL CREEK
<b>3. ADDRESS OF OPERATOR:</b> PO Box 6501, Englewood, CO, 80155		<b>8. WELL NAME and NUMBER:</b> HCU 13-33F
<b>PHONE NUMBER:</b> 303 397-3727 Ext		<b>9. API NUMBER:</b> 43047366850000
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1214 FSL 0356 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWSW Section: 33 Township: 10.0S Range: 20.0E Meridian: S		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
		<b>COUNTY:</b> UINTAH
		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input checked="" type="checkbox"/> ACIDIZE	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 6/16/2016	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
XTO Energy Inc. performed an Acid Treatment on this well per the following: 06/09/16: MIRU SLU. Recd bar stk plngr. Recd PCS BHBS/SV. SWI for acid job. RDMO SLU. 06/13/16: MIRU Pump truck. Pumped 500 gals 15% HCL w/additives & 30 bbls TFW flush down csg. Pumped 250 gals 15% HCL w/additives & 31 bbls TFW flush down tbg. RDMO pump truck. 06/14/16: MIRU SWU. RIH w/swb tls. 06/15/16: RIH w/swb tls. 06/16/16: RIH w/swb tls. Cycld plngr to surf twice. RDMO SWU.		
Accepted by the Utah Division of Oil, Gas and Mining <b>FOR RECORD ONLY</b> July 05, 2016		
<b>NAME (PLEASE PRINT)</b> Rhonda Smith	<b>PHONE NUMBER</b> 505 333-3215	<b>TITLE</b> Regulatory Clerk
<b>SIGNATURE</b> N/A	<b>DATE</b> 7/5/2016	